

User's manual

OVERVIEW CONTROL MANAGER

Doc-3378-2

User level: operator

DOC-3378-2, Current Version

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	main issue	update
chapter 1		
chapter 2		
chapter 3		
chapter 4		
chapter 5		
chapter 6		
Chapter7		
Chapter8		
Chapter9		
Chapter10		

new: The corresponding chapters are new or completely revised.
corr.: Passages of the corresponding chapter were corrected; see modification bars.
add.: Passages of the corresponding chapter were added; see modification bars.

This manual refers to following software versions

OverView Control Manager	Release 1.3
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Document History

Modifications, which result in a new version, are indicated by a vertical bar.

New in release 1.3:

- JRE installation is included in the setup
- Extended error information
- Support of localization
- Advanced configuration paramaters
- Visualization of the selected mini-module in the grid on the display wall (press ALT while selecting)

New in release 1.2:

- Support for Linux
- Support of small module view
- Support of display walls comprising projection units with one and with two DVI interfaces
- Test patterns for individual projection modules
- Different password for Operator mode and Service mode
- Start of the OCM client via the context menu of the icon in the system tray

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Revision sheet

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Please correct the following points in this documentation (**DOC-3378-2**):

page

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correct

Contents

1 Introduction.....	1-1
1.1 How this manual is organized	1-2
1.2 Styles and Symbols.....	1-3
2 Summary	2-1
2.1 General.....	2-2
2.2 OVERVIEW D projection systems	2-2
2.3 OVERVIEW CONTROL MANAGER software	2-2
3 Getting started.....	3-3
3.1 OCM - for operators	3-4
3.1.1 Monitoring a display wall.....	3-5
3.1.2 Switching a display wall on/off.....	3-8
3.1.3 Switching an individual projection module on or off.....	3-8
3.1.4 Check lamp status, determine the active lamp, change the active lamp	3-9
3.1.5 Select the active source (firmware 3.x or higher only)	3-10
3.2 OCM - for service	3-11
3.2.1 Brightness locking.....	3-11
3.2.2 Lamp maintenance.....	3-15
3.2.3 Color and brightness adjustment (homogeneity).....	3-19
3.2.4 Source selection and source switching mode (firmware 3.x or higher only).....	3-24
3.2.5 Control of Infra Red Control, message boxes and error boxes of the OSD	3-26
3.3 OCM – For Barco technicians	3-27
3.3.1 Release and lock hot standby operation mode	3-27
3.3.2 Lamp Driver.....	3-27
3.3.3 Change White Peaking	3-28
3.3.4 Update lamp voltage	3-29
3.3.5 Update log level.....	3-30
3.3.6 Re-calibrate brightness.....	3-31
3.4 Known issues	3-1
4 Configuration of the projection modules.....	4-1
4.1 Projector address and cabling.....	4-2
4.2 Baud rate	4-3
5 OverView Control Manager on Linux platform	5-1
5.1 System requirements	5-2
5.2 Best practice	5-2
5.3 Additional requirements	5-2
5.4 Installation of the OverView Control Manager on Linux.....	5-2

5.5 Start parameter for the OverView Control Manager client application	5-6
5.6 Additional commands for the OVD wall service.....	5-7
5.6.1 Check if the OVD wall service is running	5-7
5.6.2 Disable / re-enable automatic startup of the OVD wall service	5-7
5.6.3 Start / stop / restart the OVD wall service	5-8
5.6.4 Check the log file	5-8
5.6.5 Uninstalling the OverView Control Manager	5-8
5.7 Configuration of the Barco RC Agent	5-9
6 OverView Control Manager on Windows platform	6-1
6.1 System requirements	6-2
6.2 Best practice	6-2
6.3 Used ports	6-2
6.4 Setup	6-3
6.4.1 Server installation.....	6-5
6.4.2 Client only installation.....	6-7
6.5 Shortcuts created by the setup procedure	6-10
6.5.1 Configuration of the shortcut	6-12
6.6 Icon created by the setup procedure	6-12
6.7 OVD wall service	6-13
6.7.1 General.....	6-13
6.7.2 Start service	6-13
6.7.3 Start OCM Client	6-14
6.7.4 Stop Service	6-14
6.7.5 Restart Service	6-14
6.7.6 Configure Service	6-15
6.7.7 Open Console	6-17
6.7.8 About the service.....	6-18
6.7.9 Exit.....	6-18
7 OCM client application	7-1
7.1 Different operating systems	7-2
7.2 Launching the client application.....	7-2
7.3 File menu	7-5
7.3.1 Authorization.....	7-6
7.3.2 Wall Information	7-7
7.3.3 Wall Information – Health Details	7-8
7.3.4 Exit.....	7-11
7.4 Action menu	7-12
7.4.1 Run Mode.....	7-13
7.4.2 Source Selection (firmware 3.x only).....	7-14
7.4.3 View Menu	7-15
7.4.4 Module View	7-16
7.4.5 Lamp View	7-17
7.4.6 Input Sources (firmware 3.x only)	7-18

7.4.7 Help Menu.....	7-19
7.5 Context menu of the items in the grid.....	7-20
7.5.1 Module view	7-20
7.5.2 Lamp view.....	7-23
7.6 Tool bar	7-24
8 Special configurations.....	8-1
8.1 Localization	8-2
8.1.1 How to create language files.....	8-3
8.1.2 How to facilitate the creation of language files.....	8-5
8.1.3 How to start the OverView Control Manager in a different language	8-6
8.2 Large display wall.....	8-8
8.3 Projection units with one and with two DVI inputs (XGA resolution).....	8-10
9 The OverView Control Manager configuration file	9-1
10 Troubleshooting	10-1
10.1 Communication problems	10-2
10.2 DDP communication error	10-3
10.3 Hot Line	10-5

1 Introduction

This chapter explains the structure of the manual itself and the used typographic styles and symbols.

1.1 How this manual is organized

This section explains the structure of the manual itself and the used typographic styles and symbols. Safety information is provided concerning the operation of computer systems from BARCO.

- **Introduction**
gives an overview about the used styles and symbols.
- **Summary**
gives an overview about the functionality of the OverView CONTROL MANAGER software
- **Getting started**
gives an overview about the functionality of the OCM client for the different run modes
- **Configuration of the projection modules**
informs about the required settings and cabling of OverView D
- **Installation of OverView Control Manager on Linux platform**
explains the installation of the OverView Control Manager on Linux systems, the start parameters and special commands
- **Installation of OverView Control Manager on Windows platform**
explains the installation of the OverView Control Manager on Windows systems, the start parameters and shortcuts
- **OverView Control Manager Client**
shows the different operating modes of the client and the corresponding user interfaces. This is independent of the operating platform
- **Special configurations**
explains how to display an OverView Control Manager grid for large display walls without scrollbars and display wall employing projection units of the first and second generation
- **Trouble shooting**
shows solutions in case a problem occurs

Chapters, pages, figures and tables are numbered separately. Chapters are indicated by a »point syntax«, e. g. **4.2.3**, pages by a »dash syntax«, e. g. **2-1**, as figures and tables are, e. g. **figure 5-4**.

1.2 Styles and Symbols

The typographic styles and the symbols used in this document have the following meaning:

Bold	Labels, menus and buttons are printed in Bold font.
Condensed	Links to both other chapters of this manual and to sites in the Internet are printed condensed . In the on-line version of this manual all hyperlinks appear teal .
Courier	Names of files and parts from programs are printed in the Courier font.
Courier bold	Inputs you are supposed to do from the keyboard are printed in Courier bold font.



The sheet icon indicates additional notes.



Next to this icon you find further information.



This icon marks tips.



Next to this icon you find important notes.

2 Summary

This chapter gives an overview about the functionality of the OVERVIEW CONTROL MANAGER software.

2.1 General

OVERVIEW CONTROL MANAGER is a software to monitor and control projection systems of the OVERVIEW D series via a graphical and intuitive user interface.

2.2 OVERVIEW D projection systems

Projection systems of the OVERVIEW D series employ a projection unit based on DLP technology and a dual lamp illumination unit.

The sophisticated projection systems allow to be adjusted in color, brightness, luminance, and to select the operating mode (hot standby, cold standby) as well as the active lamp. Serial numbers of the projection unit and the illumination unit as well as the runtime of the projection unit and the lamps are stored in the system and can be accessed and modified.

OVERVIEW D offers an OnScreen Display, thus allowing controlling every individual projection system via an IR Remote Control. By nature, the OSD is overlaying the applications on the display wall and does not allow monitoring the system all the time. Moreover the OSD refers to a single unit and not to the entire display wall.

To monitor and control an OVERVIEW D display wall, use the **OVERVIEW CONTROL MANAGER** software!

2.3 OVERVIEW CONTROL MANAGER software

The OVERVIEW CONTROL MANAGER software is a Java application to monitor and control projection systems of the OVERVIEW D series. Starting with Release 1.2, not only Windows platforms are supported, but also Linux and X.11.

Once installed, the OVERVIEW CONTROL MANAGER service (OVD wall service) runs on the PC after booting the systems. Thus it is completely independent if and who logged in.

Depending on the actual requirements, the client software (OCM client) can be run in different modes allowing different levels of interactions.

In the **Operator** mode, the user is informed about the status (health) of every projection system, he can switch the entire display wall or a selected projection module on and off.

In case the projection module provide two DVI interfaces to display alternatively two sources (only for projection systems with firmware 3.x or higher), he can select the active source.

In **Service** mode (advanced mode) in addition to these basic features the user can introduce new lamps into the system (e.g. after a lamp failure and replacement of the lamp module), view and reset errors, change the brightness target and view detailed data of system. If hot standby is enabled, the operating modus can be selected. Color and luminance can be adjusted and multiple profiles can be created to store the current settings and to reload them whenever wanted.

In case the projection modules provide two DVI interfaces to display alternatively two sources (firmware 3.x or higher), in addition to the selection of the source also the switching mode (behavior on signal loss and re-establishing of the previous signal) can be selected.

For **Barco technicians** an extended **Expert** mode is provided to view and manage system data, perform recalibration, disable over temperature protection and the dimmer, change the white peaking factor, release hot standby operation mode and to introduce the actual lamp driver into the system when taking into operation a display wall for the first time or after the entire wall has been upgraded with a new lamp driver.

Authorization to modify and manage system data is granted after entering the correct password (independent passwords to access the **Service** mode and the **Operator** mode).

The following chapters might give you an idea about the capabilities of OVERVIEW CONTROL MANAGER software. For further information please refer to the description of the user interface in chapter 7.

3 Getting started

3.1 OCM - for operators



To be able to operate the OCM client, first of all authorization has to be given: Select File|Authorization and enter the correct password. Subsequently the commands and buttons will be enabled. (In case the password has already been entered as start parameter in the short cut, you will have enabled menus and buttons from start.).

In the operator mode, the OCM allows to monitor the health of a display wall, to switch the entire display wall or individual projection modules on or off.

The OVERVIEW D projection systems employ a dual lamp illumination system with a top lamp and a bottom lamp. One of these lamps is the active lamp to illuminate the optics, the other one is the backup lamp (fall back in case of a lamp failure).

The operator can check which lamp is the active one, and he may also switch the active lamp.

In case the projection modules provide two DVI interfaces to connect two sources, he can also switch between these sources (only available with firmware 3.x or higher).

The respective actions can be selected in the **Action** menu. If selected, they will be executed on all projection modules of the display wall.

In addition, the OCM client offers different views. These views are selected in the **View** menu. The **Module View** shows the representatives of the display wall in a grid, in the **Lamp View** a further refinement is made: each cell displays lamp top and lamp bottom.

In case the projection systems support two DVI inputs, **Source Selection** shows the active source.

By means of the context menu when right-clicking one of the items in the grid a single projection module can be addressed and switched.

3.1.1 Monitoring a display wall

When monitoring a display wall, the main important information is about the health of the systems: Does everything work as expected? If not – what's the problem?

The OVERVIEW CONTROL MANAGER provides a health icon in the status bar which indicates the health of the display wall. In addition, the individual health of a projection module and the both lamps are visualized in the grid. If a problem occurs, detailed information is given on a dedicated dialog tab.

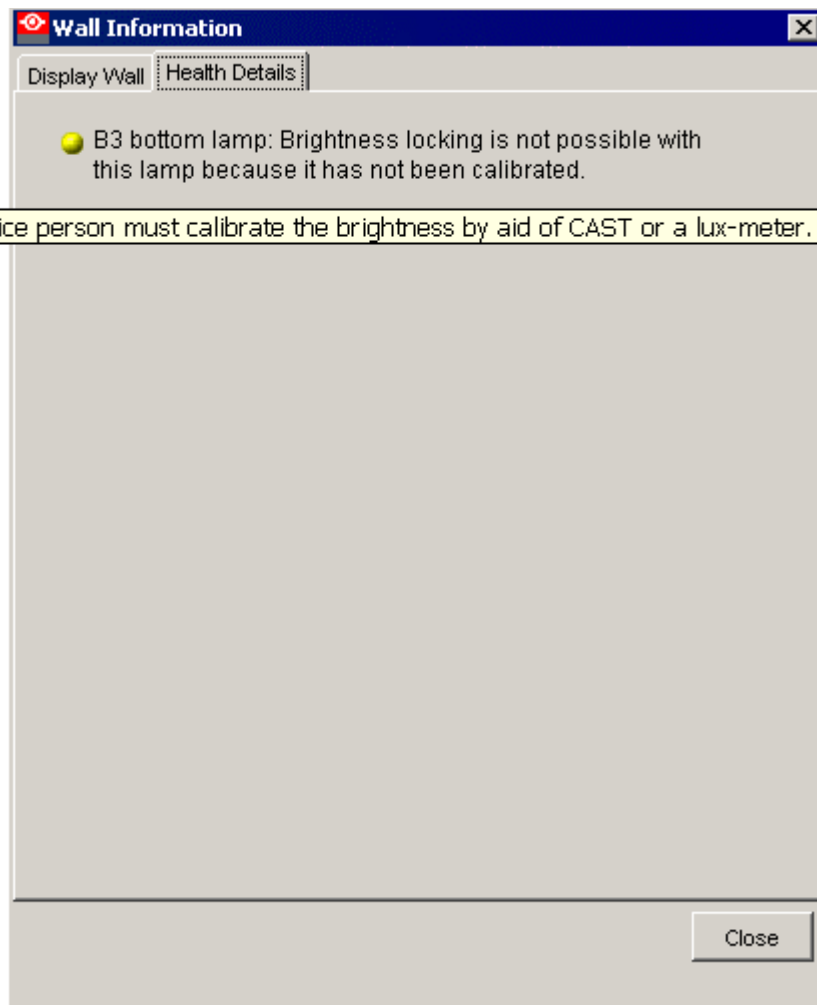


At a glance, the status bar and the grid provide information about the health of the system. To learn how to read it, cf. [Wall Information - Health Details](#)

Details of the problem can be found on the dialog **File|Wall information**:

To open this dialog, there are three possibilities:

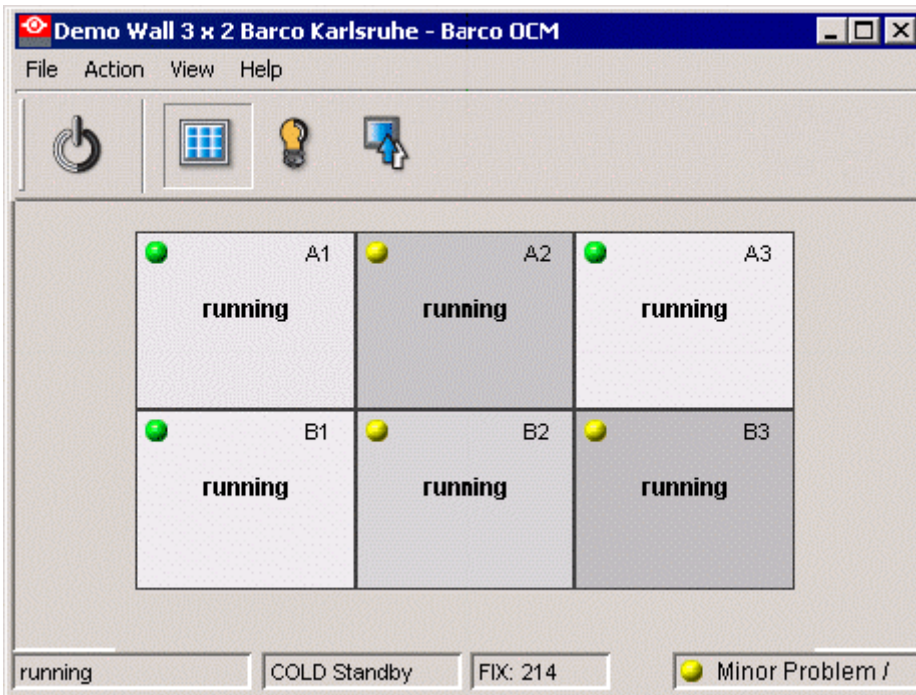
- Double click on the yellow icon in the status bar.
- Double click on the yellow icon in the grid.
- Select the menu command **File|Wall information**.



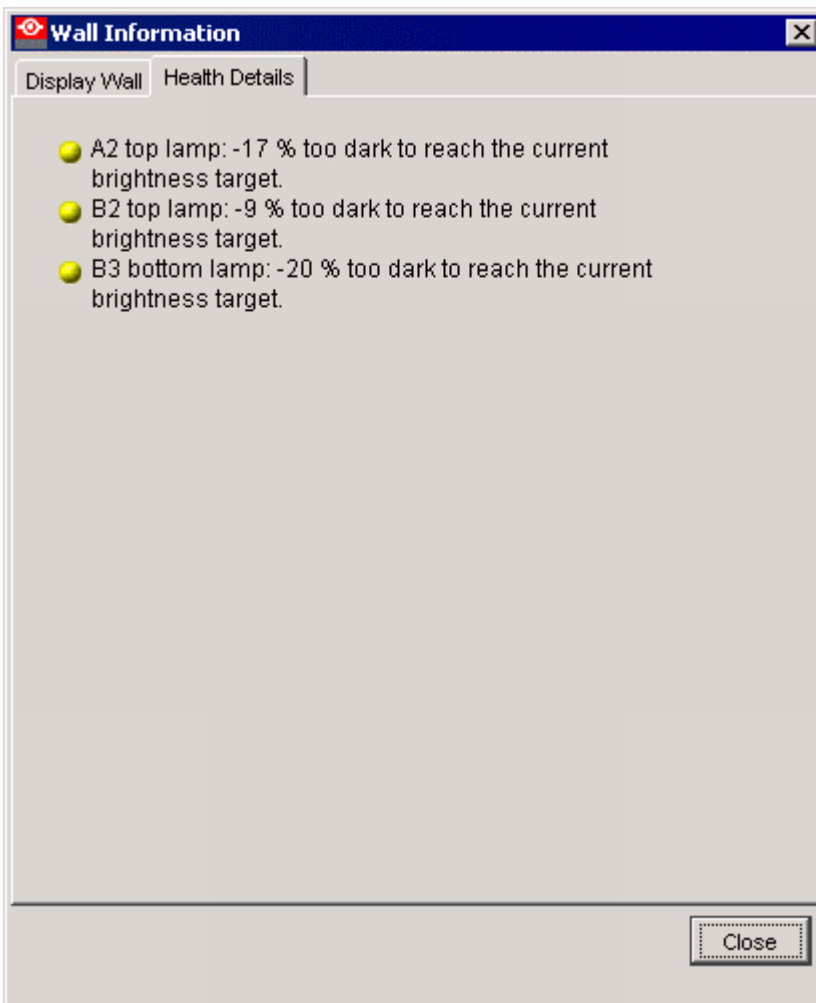
On the Health Details tab, the tool tip texts (move the mouse slowly of their information about the problem) offers a solution.

However, these solutions require probably to run the OCM client in service mode.

As you can also see, the brightness level is indicated by different gray level:

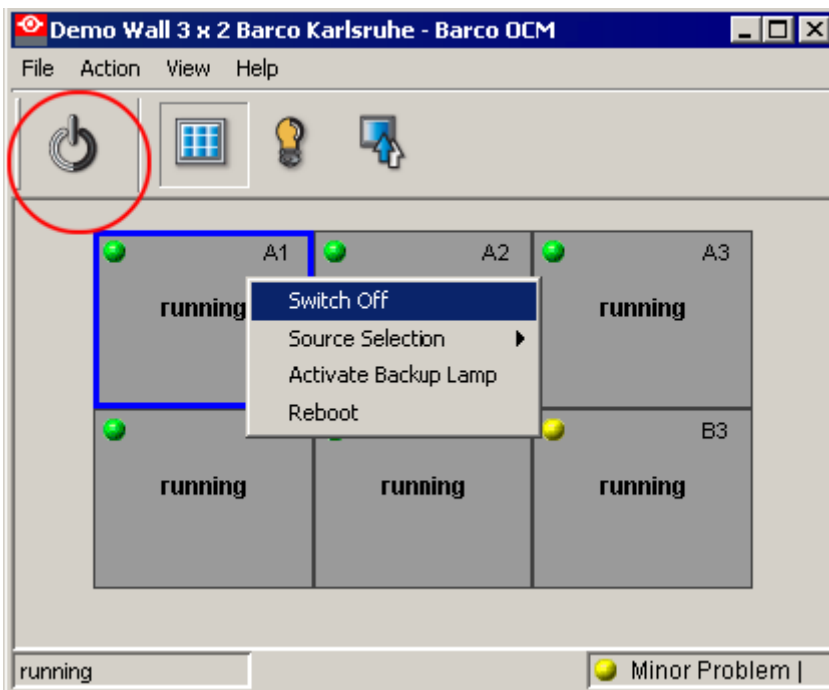


if all representatives of the projection modules in the grid have the same gray level, the display wall features homogeneous brightness. In case the gray of the cells are different, you can see which cubes are darker (in the example, these are the cubes A2, B2, B3). Besides you can use **File|Wall Information|Health Details** to find out how much the brightness differs.



3.1.2 Switching a display wall on/off

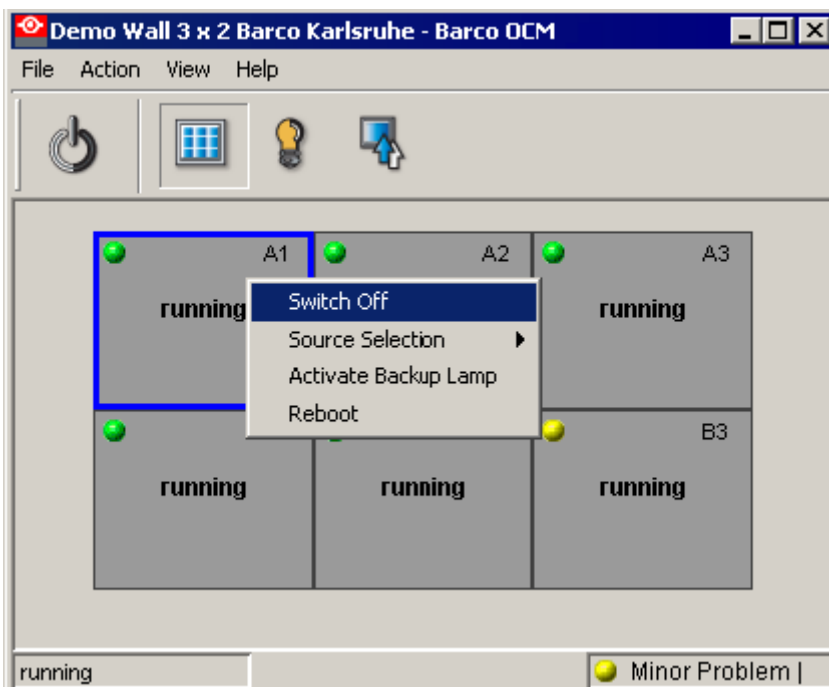
The OVERVIEW CONTROL MANAGER enables to switch the entire display wall on/off at a simple mouse click.



It goes without saying, that it is also possible to switch a single projection module on/off.

3.1.3 Switching an individual projection module on or off

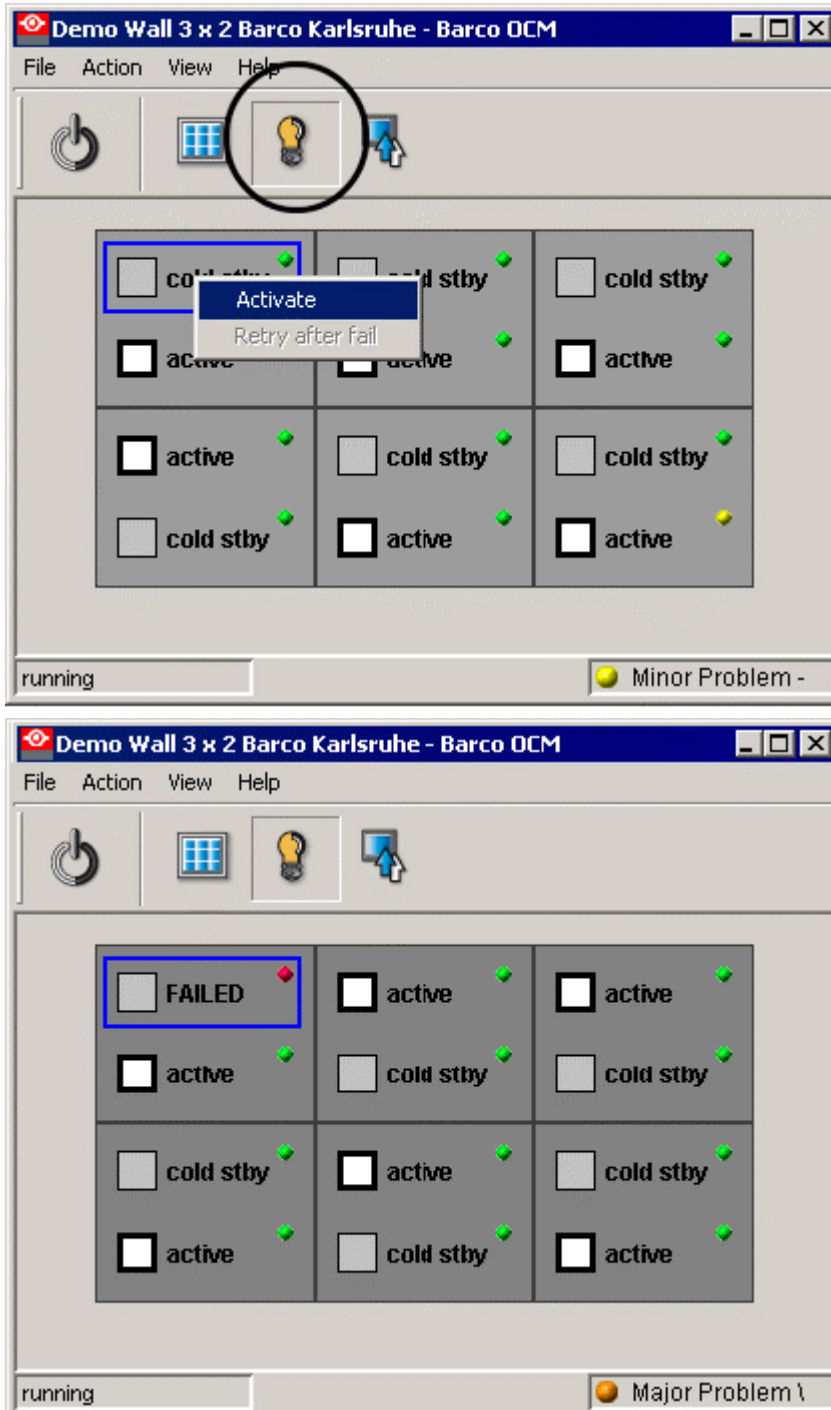
In the grid, clicking on a cell will open the context menu with the command to switch the projection module on or off.



3.1.4 Check lamp status, determine the active lamp, change the active lamp

Projection systems of the OVERVIEW D series are dual lamp systems. One lamp is active; the other one is the backup lamp. In case of a lamp failure, the backup lamp becomes the active lamp. However it might be desired to change the active lamp deliberately.

The lamp view allows seeing which lamp is running and which one is in (cold or hot) standby. The context menu allows activating the backup lamp. In case of a lamp failure, the broken lamp is indicated by a red dot.



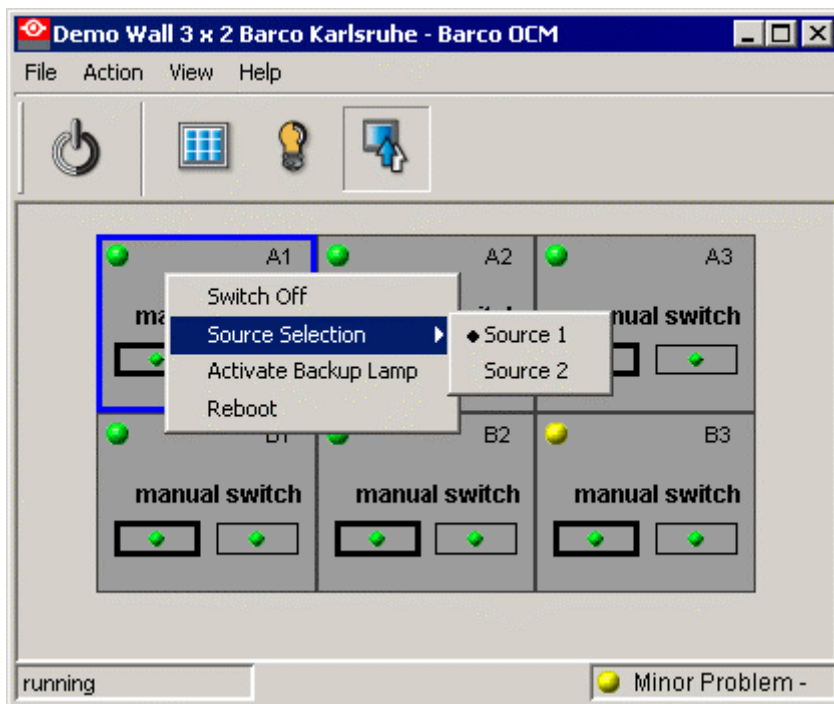
3.1.5 Select the active source (firmware 3.x or higher only)

In case the projection modules provides two DVI interfaces to connect two sources, the active input can be selected for all projection modules using the command **Action|Source Selection**.

Of course it can also be checked if a source is connected: **Select View|Input sources** to show input 1 and input 2 as rectangles in the grid, the left rectangle refers to input 1, the right one to input 2. In case a source is connected, there is a green dot within the rectangle. A missing source is indicated with a red dot.

The rectangle of the active source has got a bold black border.

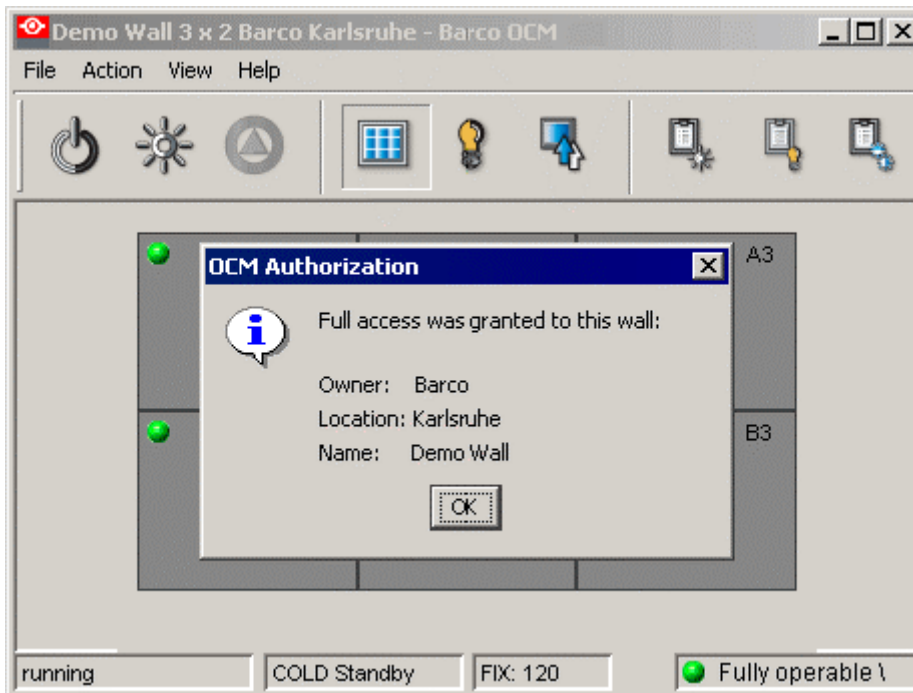
To change the active source for an individual projection module, use the context menu



Please refer also to the reference section, chapter 7.

3.2 OCM - for service

In this chapter only the additional functionalities are explained. Of course all commands and functions of the Operator mode are also available.



3.2.1 Brightness locking

OVERVIEW D projection modules are designed with the possibility of brightness regulation: a direct illumination sensor (DIS) measures the light output.

By means of an optical dimmer the light output of a lamp can be controlled. The dimmer can be set between the maximum value (all light of the lamp is coupled into the light rode) and its minimum value (40% of the entire light output).

Thus the light output can be set to and compared with a given target.

Setting all projection modules of the entire display wall to the same target results in a display wall featuring homogeneous brightness distribution.

Of course this brightness target has to be achieved by all active lamps.

In case the active lamp changes or in case of lamp replacement this lamp may no longer fit into this target.

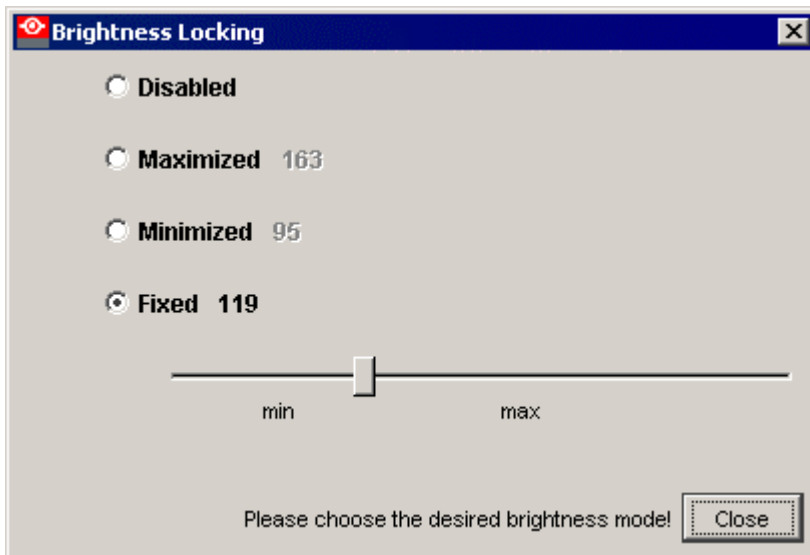
Also lamp aging processes might result in lamps no longer adjustable to this target.

Then of course the brightness distribution of the display wall will no longer be homogeneous.

That's why the OVERVIEW CONTROL MANAGER offers **Brightness locking**.

Click on the **Brightness locking** button of the toolbar (second left button, see also tool tips). The brightness dialog pops up. When the OCM is started and the **Brightness Locking** dialog is opened the first time, it will show **Fixed** in case the display wall has a common brightness target (all projection modules set to the same target).

In case the projection modules differ in brightness target, the dialog will come up showing **Disabled**.



The minimum value and the maximum value refers to the currently active lamps only!

Since the display wall shall feature a homogeneous brightness, homogeneity can only be achieved in the range defined by the maximum light output of the darkest lamp and the minimum output of the brightest lamp.

The display wall can be run at maximized brightness (determined by the darkest lamp), minimized brightness (determined by the brightest lamp) or at a fixed brightness target (between the maximum value and the minimum value).

Next to the option the respective brightness values (lx) are indicated.

Option	Brightness target
Disabled	In case the projection systems of a display wall do not have a common brightness target, the dialog opens with Disabled selected.
Maximized	The brightness target of the display wall is always the maximum value of the darkest lamp.
Minimized	The brightness target of the display wall is always the minimum of the brightest lamp
Fixed	Use the slider bar to define the brightness target. This might be recommended in case it is only one lamp which e.g. forces the max. value down. In case all projection systems of a display wall have the same brightness target, the dialog opens with Fixed selected. (The value then corresponds to the value of the brightness target)



Whereas the brightness mode Maximized and the brightness mode Minimized are dynamic targets (in case of lamp aging the target will be adjusted automatically) represents the brightness mode Fixed a static target which might no longer be reached in case the lamps show reduced brightness due to aging processes..

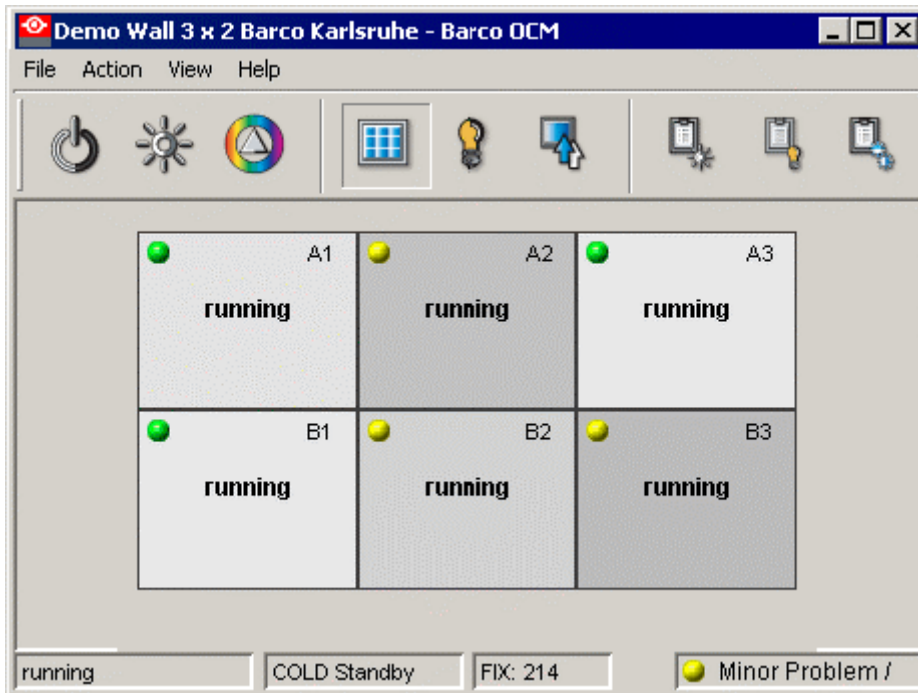
The brightness mode is indicated in the status bar.

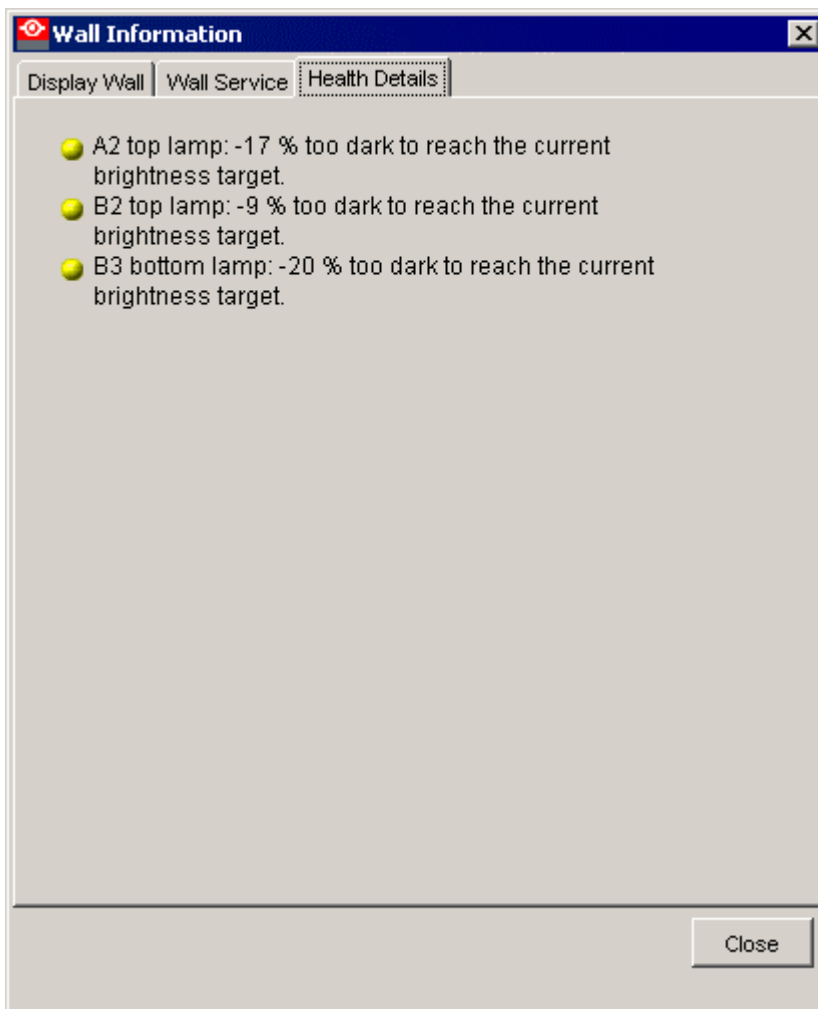
The last applied brightness mode and the brightness target value is memorized and restored properly when the wall service is restarted.

When changing the value for **Fixed**, changes will be applied to the display wall as soon as the slider bar has been released.

If **Fixed** is selected, and a value is set which is above the value indicated as the max. brightness or below the value indicated for the minimal brightness, the display wall cannot be adjusted to feature homogeneous brightness. The representative of the cubes in the grid show different gray color to indicate the different brightness level of the cubes.

The health status will then indicate a minor problem (yellow). Use **File|Wall Information|Health Details** to view the distance of the target of those projector which cannot be adjusted to the target.





Please keep in mind that brightness also influences the color adjustment. In case the brightness locking mode is e.g. set to Maximum, and the brightness shifts due to aging processes, also the color will shift.

3.2.2 Lamp maintenance

The OCM client allows checking and viewing all relevant lamp data:

- runtime and serial number
- minimum and maximum brightness (dimmer position at 40% or at 100% open, respectively).
- operation mode
- brightness correction factor

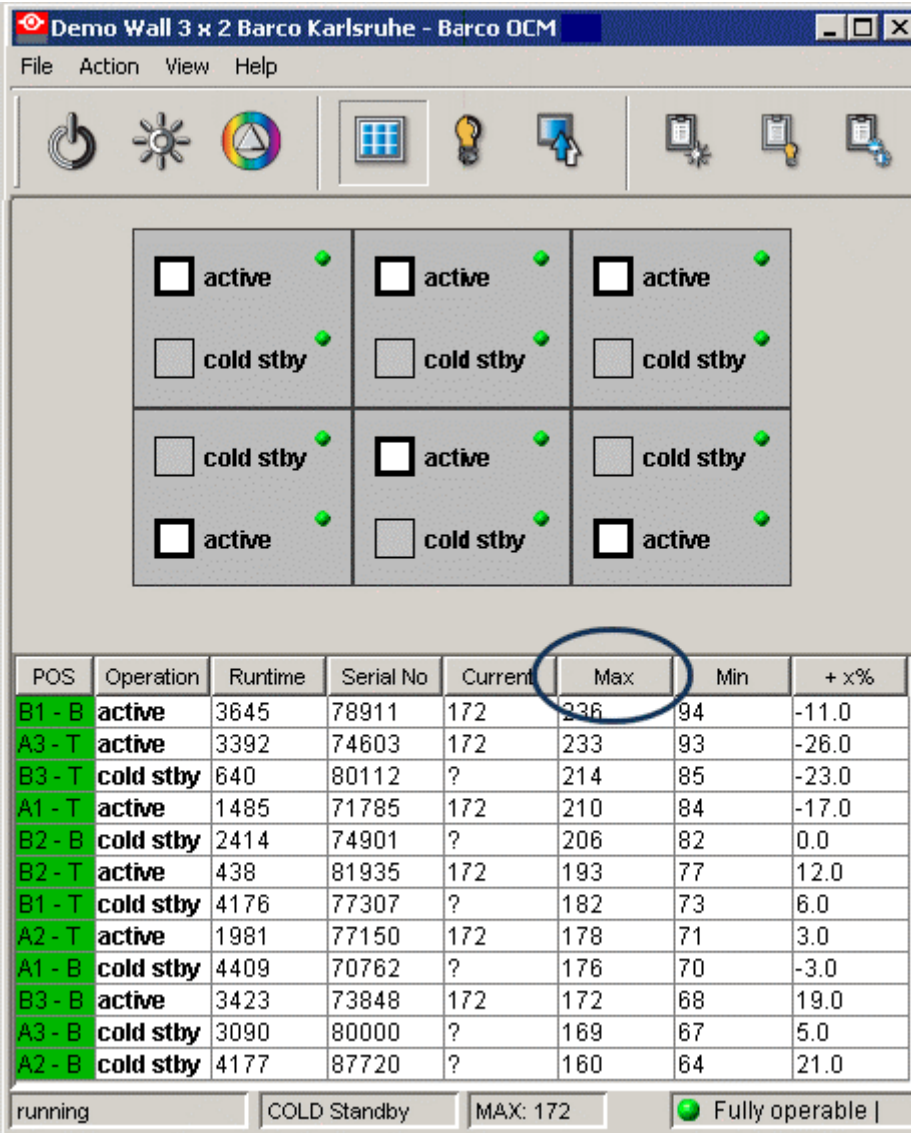
All lamp relevant values can be viewed in the lamp property table.

The screenshot shows the 'Demo Wall 3 x 2 Barco Karlsruhe - Barco OCM' window. The 'View' menu is open, highlighting 'Lamp Property Table'. Below the menu, a grid of lamp status icons is visible, with 'active' and 'cold stby' labels. At the bottom, a table displays lamp data for various positions (A1-T, A2-T, A3-T, B1-T, B2-T, B3-T, A1-B, A2-B, A3-B, B1-B, B2-B, B3-B).

POS	Operation	Runtime	Serial No	Current	Max	Min	+ x%
A1 - T	cold stby	53	74303	?	159	63	30.0
A2 - T	cold stby	1325	84581	?	214	85	-19.0
A3 - T	cold stby	3115	76980	?	230	92	-13.0
B1 - T	active	1888	81327	120	183	73	7.0
B2 - T	cold stby	4653	83715	?	221	88	-5.0
B3 - T	cold stby	97	88116	?	229	91	30.0
A1 - B	active	5972	89560	120	163	65	-23.0
A2 - B	active	3482	79315	120	198	79	16.0
A3 - B	active	2045	89173	120	189	75	7.0
B1 - B	cold stby	136	89643	?	236	94	-14.0
B2 - B	active	5530	78933	120	179	71	-5.0
B3 - B	active	3707	73051	120 ?	171 ?	68 ?	-22.0

At the bottom of the window, there are status indicators: 'running', 'COLD Standby', 'FIX: 120', and 'Minor Problem |'.

By means of this table, the darkest lamps can easily be identified: click on the column header **Max** to sort the lamps at the criteria of max. brightness.



The screenshot shows the 'Demo Wall 3 x 2 Barco Karlsruhe - Barco OCM' window. It features a menu bar (File, Action, View, Help), a toolbar with icons for power, settings, and other functions, and a 3x2 grid of lamp status indicators. Each indicator consists of a checkbox and a label (e.g., 'active', 'cold stby'). Below the grid is a table with columns: POS, Operation, Runtime, Serial No, Current, Max, Min, and + x%. The 'Max' column is circled in blue. At the bottom, there are status indicators: 'running', 'COLD Standby', 'MAX: 172', and 'Fully operable'.

POS	Operation	Runtime	Serial No	Current	Max	Min	+ x%
B1 - B	active	3645	78911	172	236	94	-11.0
A3 - T	active	3392	74603	172	233	93	-26.0
B3 - T	cold stby	640	80112	?	214	85	-23.0
A1 - T	active	1485	71785	172	210	84	-17.0
B2 - B	cold stby	2414	74901	?	206	82	0.0
B2 - T	active	438	81935	172	193	77	12.0
B1 - T	cold stby	4176	77307	?	182	73	6.0
A2 - T	active	1981	77150	172	178	71	3.0
A1 - B	cold stby	4409	70762	?	176	70	-3.0
B3 - B	active	3423	73848	172	172	68	19.0
A3 - B	cold stby	3090	80000	?	169	67	5.0
A2 - B	cold stby	4177	87720	?	160	64	21.0

running COLD Standby MAX: 172 Fully operable



As you can see, B3 bottom is active and has a max. of only 172 whereas B3 top has a max. of 214.

So you might want to change the active lamp in B3 for a brighter setting of the display wall.

By means of this property table you can also decide if you want to extra replace some lamps, e.g. in case it is a very old lamp (sort criteria: **Runtime**) or a very dark on (sort criteria: **Max.**).

In the grid you also see when a lamp fails: it is indicated with a red dot.



Whenever a lamp fails, before replacing it, retry to ignite it again!

To do this, the OCM client offers the command **Retry after fail in the context menu of the failed lamp in lamp view.**

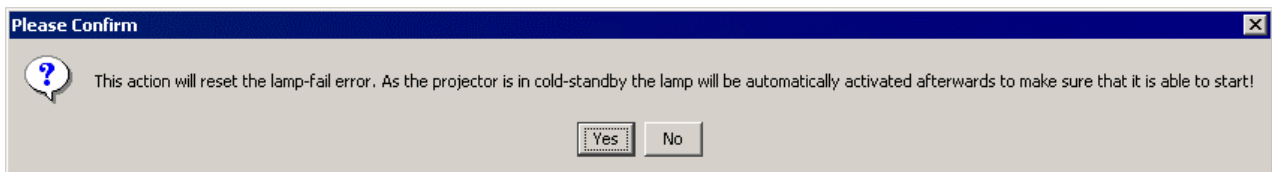
When a lamp failure occurs redundancy is no longer given!

If the command "Retry after fail" don't ignite the lamp, it is recommended to immediately replace the lamp to re-establish redundancy.

POS	Operation	Runtime	Serial No	Current	Max	Min	+ x%
B1 - B	active	3645	78911	172	236	94	-11.0
A3 - T	active	3392	74603	172	233	93	-26.0
B3 - T	cold stby	640	80112	?	214	85	-23.0
A1 - T	FAILED	1485	71785	?	210	84	-17.0
B2 - B	cold stby	2414	74901	?	206	82	0.0
B2 - T	active	438	81935	172	193	77	12.0
B1 - T	cold stby	4176	77307	?	182	73	6.0
A2 - T	active	1981	77150	172	178	71	3.0
A1 - B	active	4409	70762	172	176	70	-3.0
B3 - B	active	3423	73848	172	172	68	19.0
A3 - B	cold stby	3090	80000	?	169	67	5.0
A2 - B	cold stby	4177	87720	?	160	64	21.0

running COLD Standby MAX: 172 Major Problem /

The command **Retry after fail** resets the error bit and tries again to ignite the lamp.



It is often due to a temporary change in voltage that the lamp fails. Therefore it is always worth to retry it!

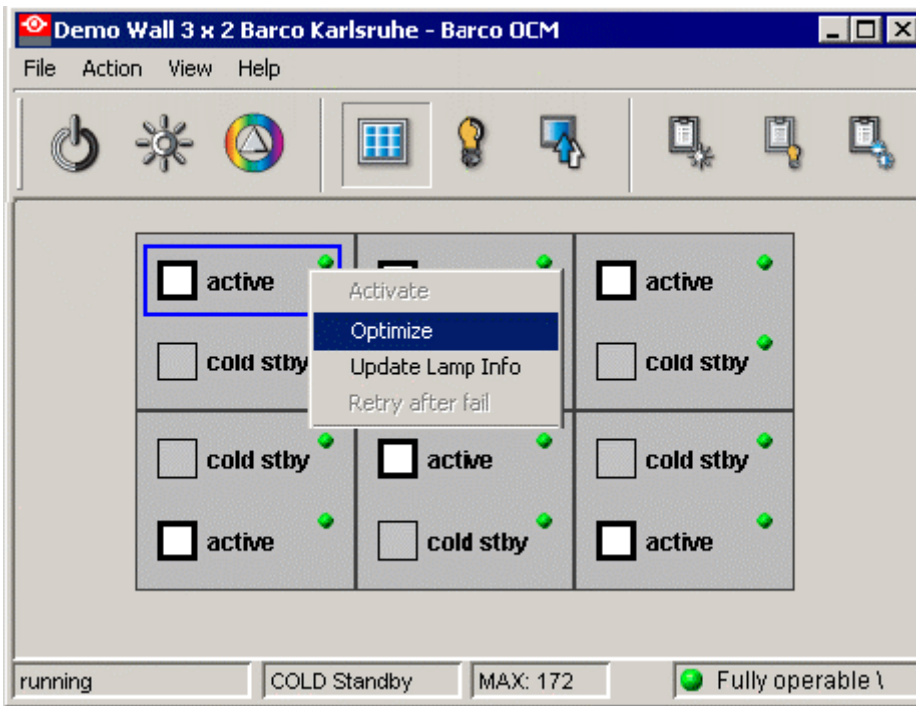
If it is a relatively new lamp (check runtime!) you might want to try it again later.

In case you decide to replace the lamp, after the failure of the **Retry after fail command**, replace the lamp as described in the user's manual of the projection system.

After the new lamp has been inserted, reset the error bit by pressing on the ON/RES switch on the rear side of the projection module.



Since it is a new lamp, the OCM does not know its brightness, its serial number etc. Therefore it is recommended to "introduce it to the OCM": select the new lamp to be the active lamp! Then the OCM can measure its data. To get the best values, first run lamp optimization!



It is also recommended to select the command **Optimize** to align the position of the mirror for the new lamp.

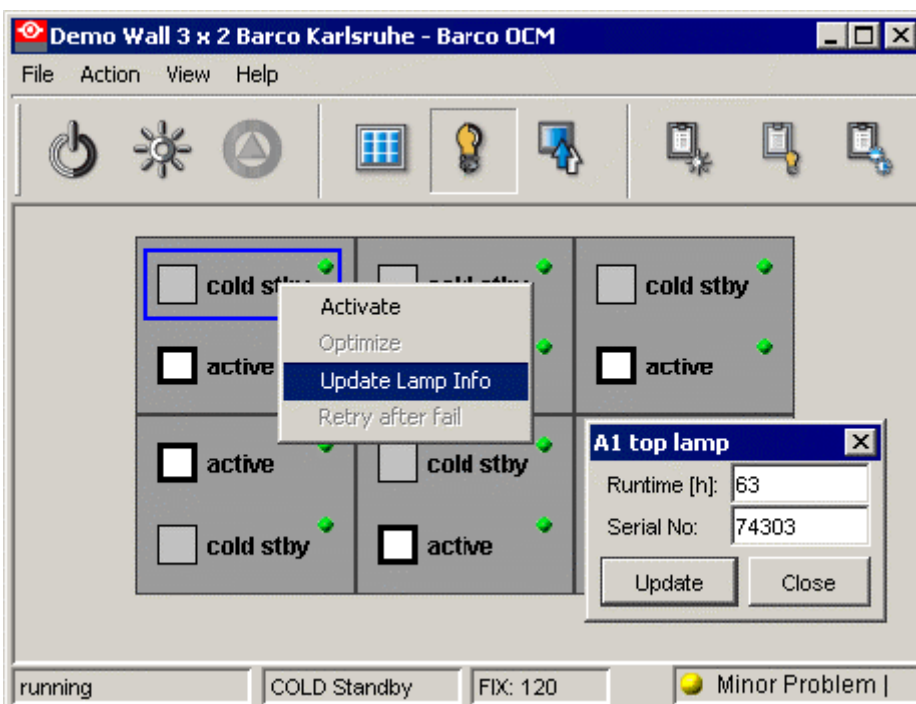


This procedure can only be performed on the active lamp.
The display gets dark for about 3 seconds.

After this you might decide to keep the new lamp as active one or as backup lamp.



No matter whether it is the active lamp or the backup lamp: enter serial number and runtime!



3.2.3 Color and brightness adjustment (homogeneity)

After a display wall has been adjusted with CAST, all projection modules feature a homogeneous color and brightness distribution.

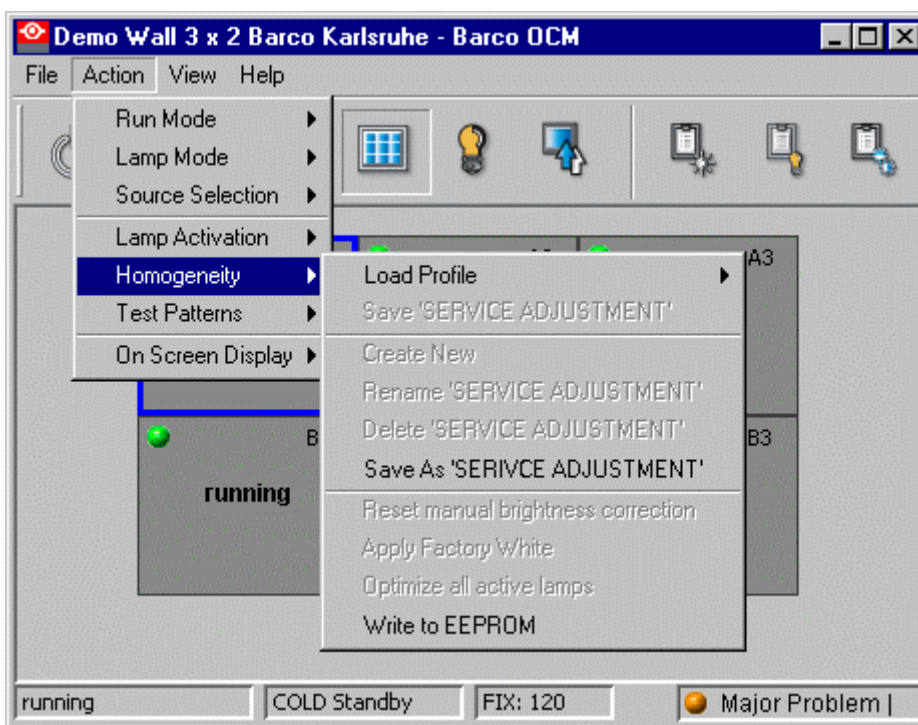
When starting the OCM client for the first time, these settings will have to be saved as **Service Adjustment** to enable a customized modification of color and/or brightness.

Service Adjustment is a special profile which, if applied, will always turn the display wall into the adjustment status done by CAST, no matter which manual modifications had been made.



It is only after the Service Adjustment is saved that the buttons for modifying color and brightness and brightness locking get enabled.

To save the **Service Adjustment** profile, select **Action|Homogeneity|Save as Service Adjustment**.

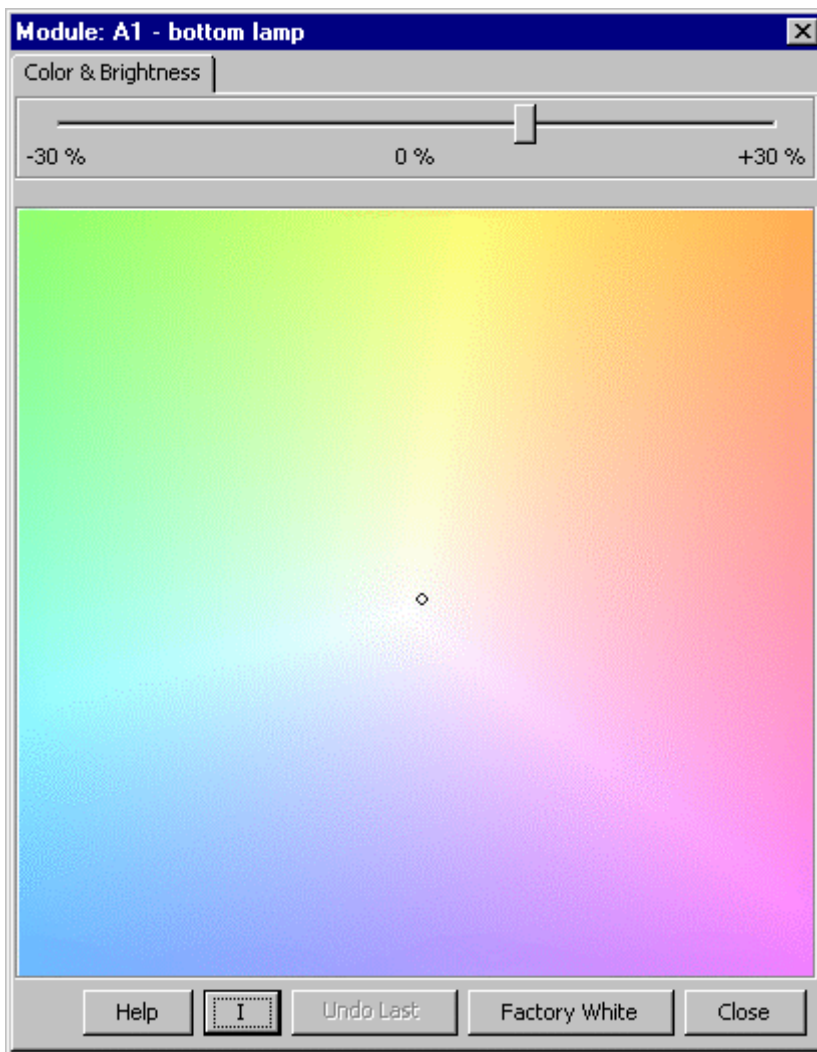


Subsequently the buttons on the toolbar are enabled and you are allowed to change color and brightness and to save your modifications also as a profile to be able to re-load it on the wall.

To modify color and brightness, select the button **Homogeneity improve** on the tool bar (third left button, see also tool tips) or select the respective command from the context menu in **Module View**.



Before the dialog to modify color and brightness opens, a white test pattern should be applied to the wall. Then the **Color&Brightness** dialog pops up.



3.2.3.1 Color adjustment

By means of the dialog, the current color impression of the selected projection module can be "entered" into the color adjustment algorithm.

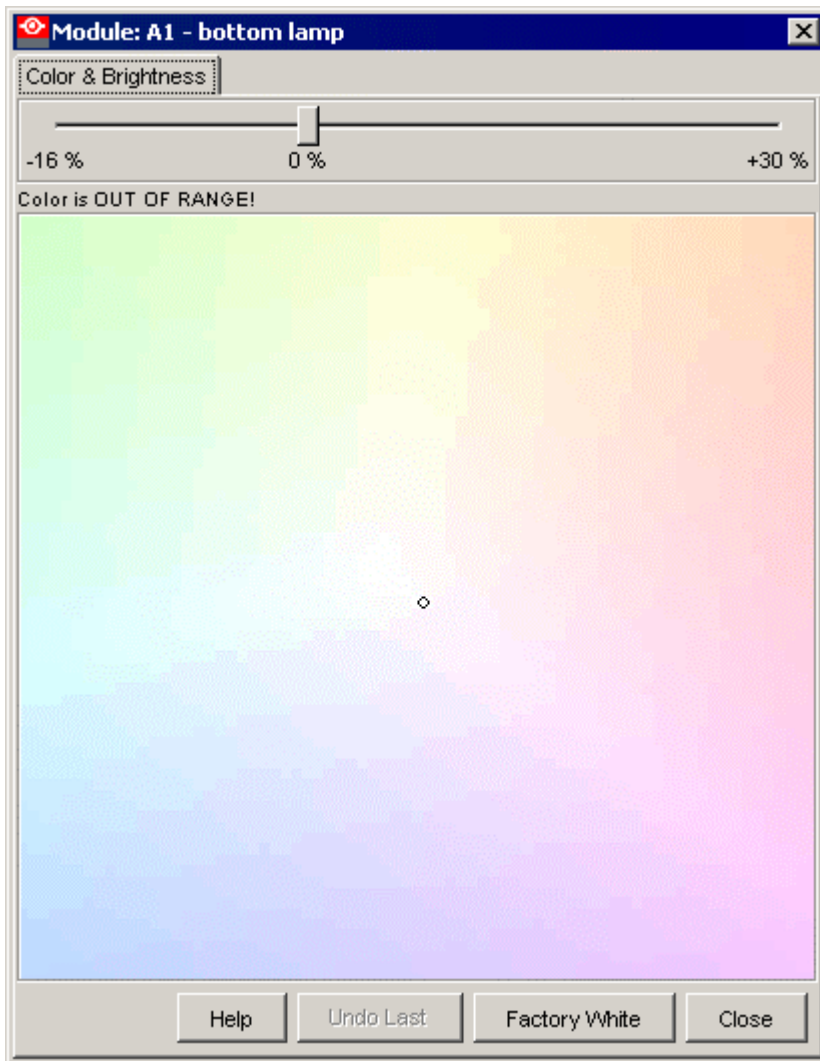
Example: If you consider the white of the projection module to be too green, indicate this "green-white" in the color bitmap by double-clicking on the corresponding color. This will modify the color correction algorithm to shift the color of the projection module towards white.

The indicated color coordinates of white as shown on top of the color bitmap will change accordingly.



In the bitmap, you have to indicate the actual color, not the desired color!
Please make sure that the color settings of your Windows desktop is set to 24bit!

In case the color you indicated is out of range, this is indicated on top of the color bitmap, and you cannot modify the target:



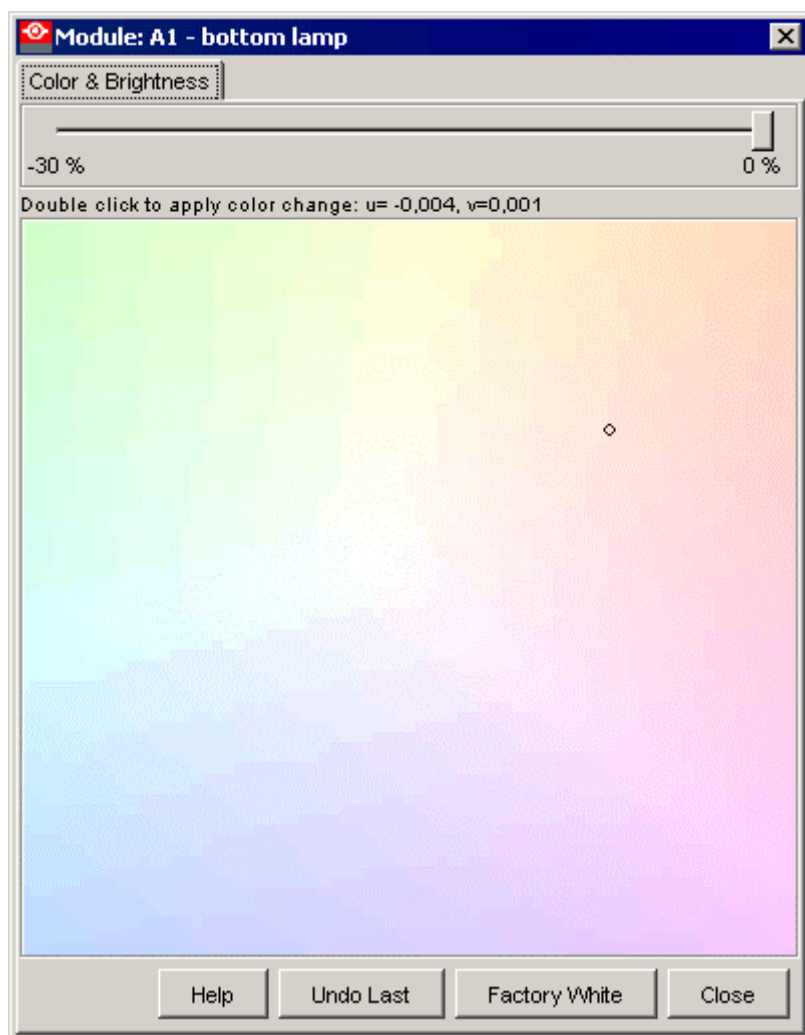
The OCM restricts color correction to a max. distance from the original factor white. Therefore your selected color may be considered to be out of range.

When you are satisfied with the white of the selected projection module, click **Close** to exit the dialog.

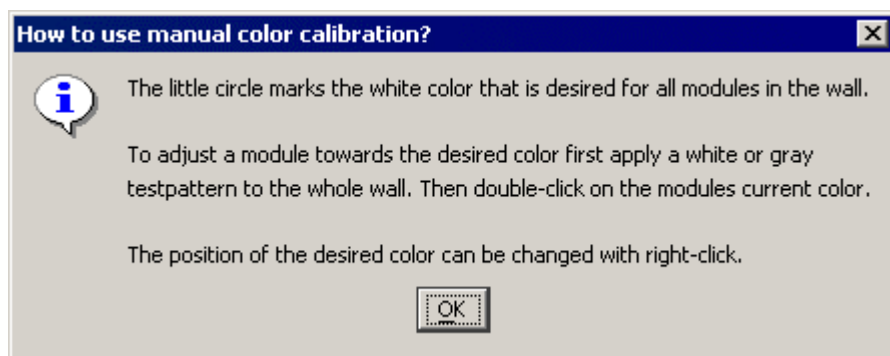


You can also shift the color of the entire display wall by holding the **CTRL** key pressed when double-clicking into the bitmap.

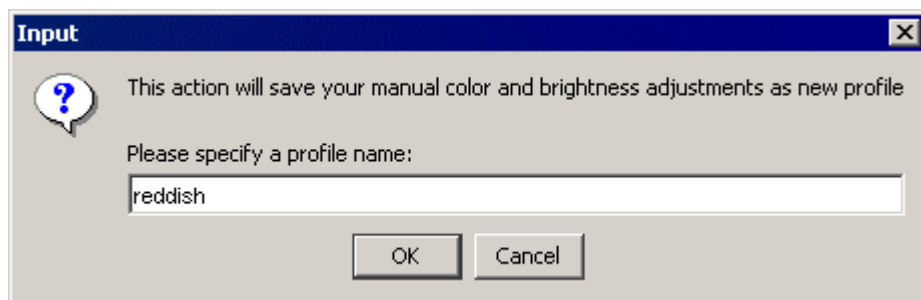
For special applications you might also want to shift the whitepoint towards e.g. red (color temperature of 3200K). This can also be done using the **Color&Brightness** dialog. Right-click in the bitmap to modify the target:



Click also on the **Help** button to learn what and how:

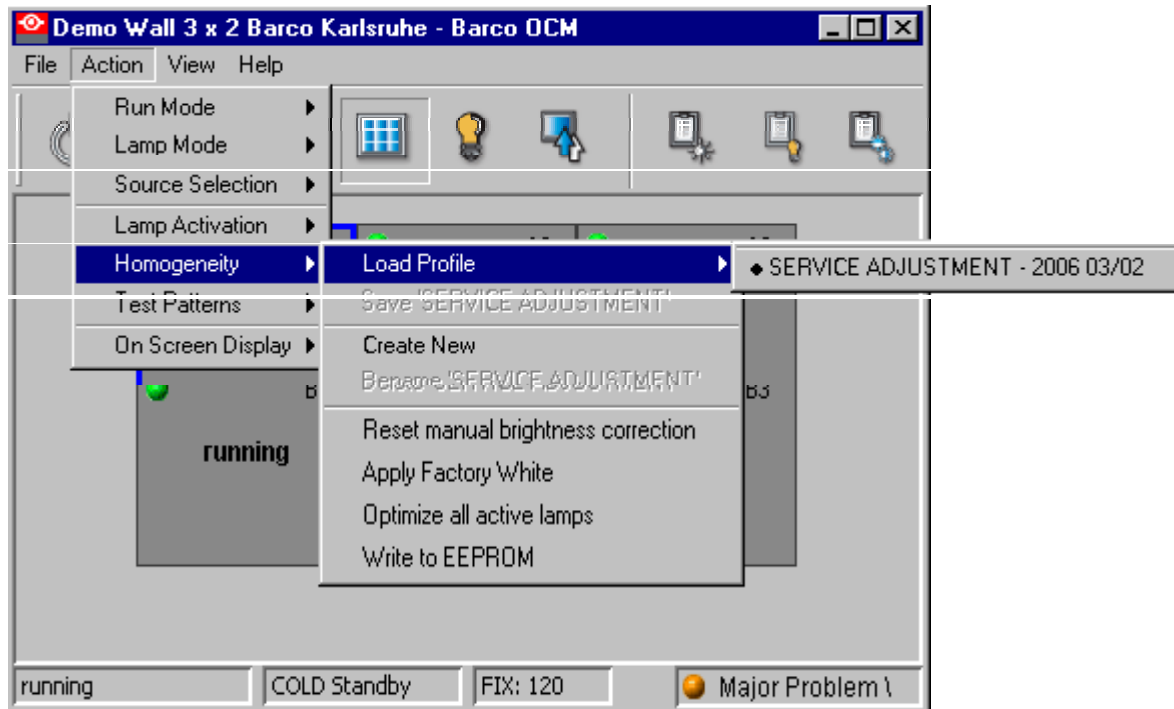


All modifications can be saved as profile using the command **Action|Homogeneity|Create New**. This will display a dialog to enter the name of the profile:



If you don't save these modifications, they will be lost when shutting down the projector.

As long as the modifications are not saved, the **Service Adjustment** profile will show two asterix next to its name to indicate that the current status of the display wall does not reflect the status of this profile:



All modifications saved as a profile can be re-applied to the display wall whenever wanted. This allows creating e.g. a profile for an application with a gray background or a special profile for a special desktop layout.

Up to three profiles can be created. The related files are stored in the folder ...**Barco OverView Control Manager\Service\Adjustment\Name_of_display_wall** on the computer running the OVD wall service.

The information stored in this file also include serial number of the projection unit and illumination unit. In case discrepancies occur (e.g. a projection unit has been replaced) confirmation is required before the profile can be loaded again.

If the discrepancies are too big, e.g. the entire display wall has been upgraded with new projection units, the profile will not be loaded any more..

3.2.3.2 Brightness adjustment

The brightness values are typically measured in the center of the projection module. After the adjustment with CAST all projection modules have the same brightness.

Due to inhomogeneities in brightness distribution within a single projection module there might however occur brightness differences on the border of adjacent projection modules. So one of these projection modules should be brighter (so that the border is brighter, too), the other one darker. But nonetheless both should be within the target.

To solve this conflict the correction factor has been introduced. This factor allows to change the brightness in the range of $\pm 30\%$ without changing the DIS value.

Use the slider bar on top of the **Color&Brightness** dialog to adjust the correction factor.

Of course this adjustment can also saved as or within a profile.



Color and brightness adjustment may also be required due to lamp aging or when a lamp has been replaced and the new lamp no longer fits into the target.

Please see also [Error! Reference source not found.](#)

3.2.4 Source selection and source switching mode (firmware 3.x or higher only)

OVERVIEW D projection modules with firmware 3.x or higher feature two DVI interfaces to connect two sources. The OCM client allows to check the sources, to select the active source and to define the switching mode.

It goes without saying that all of these functionalities can be applied to the entire display wall (menu commands) or to an individual projection module (command in the context menu of the grid in Module view).

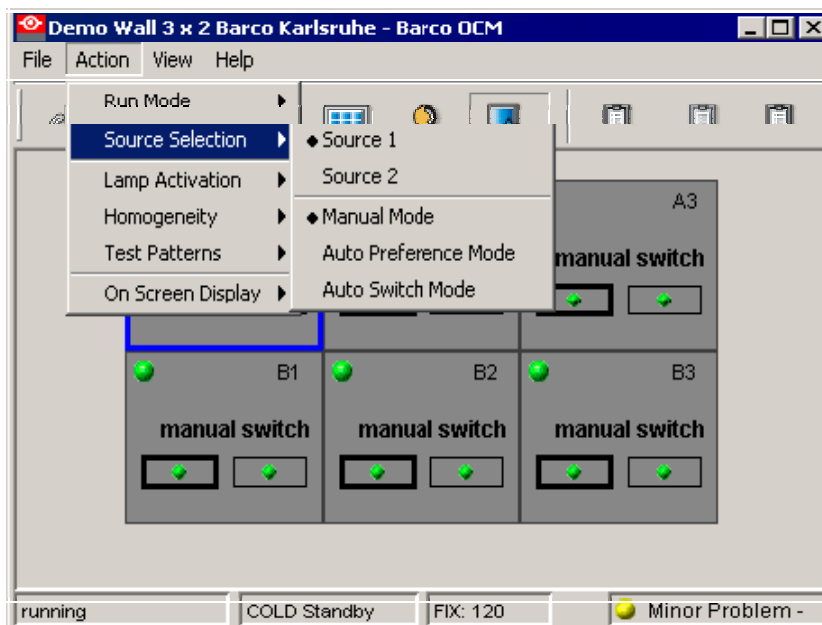
To view the sources, select **View|Input sources**.

The grid shows two rectangles, the left one represents source 1 (input 1), the right one represents source 2 (input 2). The selected switching mode is also indicated.

Green dots within the rectangles show that the sources are connected. A missing source is indicated by a red dot.

The currently active source is shown with a bold black border.

To switch the active source for all projection modules, select **Action|Source Selection**. The currently active source is indicated by a black dot. To activate the other source, click its entry in this sub menu.



As you can see, this sub menu allows also to select the switching mode.

In **Manual** Mode, all source switching has to be done by user intervention. If the active source fails, and no user intervention happens, the display shows the selected background image (e.g. color bars).

In **Auto Preference** Mode, the user selects its preferred source. This source is displayed until it fails. Then the system automatically switches to the second sources.

In case the previous source is restored, the system will switch back to the previous source, since this is the preferred one.

In **Auto Switch** mode the user selects the source to be displayed. This source is displayed until it fails. Then the system automatically switches to the second sources. This source will be displayed no matter if source 1 is re-established or not.

It is up to you to decide which mode to apply.



In case of a redundant controller, if source 1 fails, in both Auto modes the second source is displayed.

In case of Auto Preference Mode, if the failed controller re-boots, at once this signal will be displayed on the display wall. Worst case: nobody logs in, and the log-in window is displayed for hours....

Just to give you an idea about the differences of the two modes Auto Preference Mode and Auto Switch Mode.

Let's assume source 1 and source 2 are connected, source 1 is the active source.
Then source 1 fails.... and is re-established later.

Source 1	Source 2	Manual mode	Auto Preference	Auto Switch
		Selected source: will remain source 1 during all combinations!	Selected source: will remain source 1 during all combinations!	Selected source (preference): will toggle between source 1 and source 2
Preference		source 1	source 1	source 1 <--> source 2
present	present	display source 1	display source 1	display source 1, preference = source 1
gets disconnected	present	switch to background	display source 2	display source 2, preference = source 2
not connected	present	background	display source 2	display source 2, preference = source 2
gets connected	present	switch to source1	switch to source1	display source 2, preference = source 2



In Auto Switch mode, as soon as the source is switched, preference is also switched!

3.2.5 Control of Infra Red Control, message boxes and error boxes of the OSD

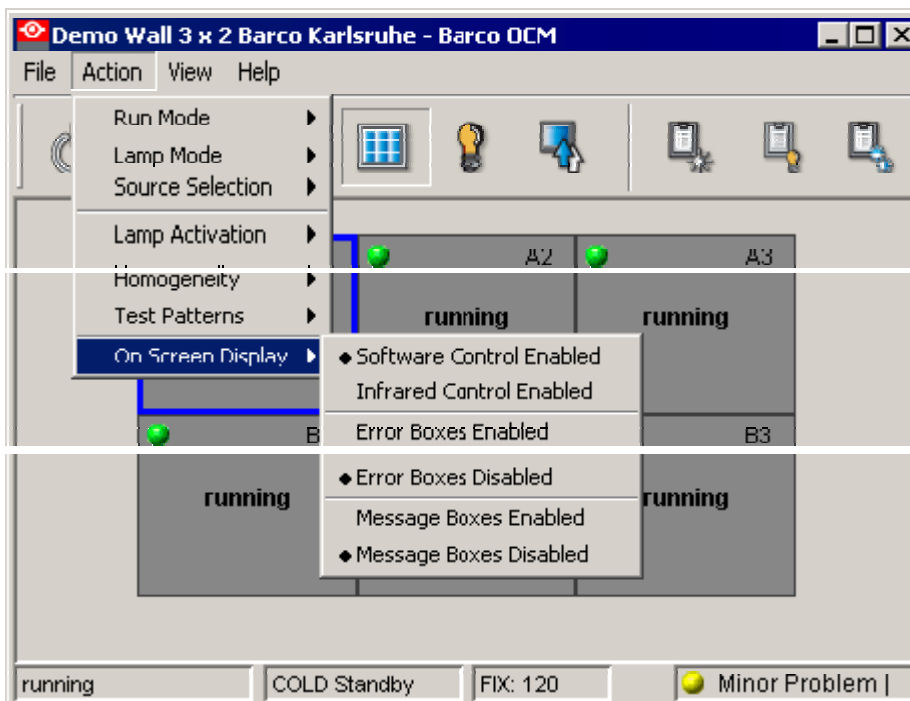
OCM client in service mode grants full control over the message boxes and error boxes of the OSD. They can be enabled and disabled for all projection modules by means of the commands **Action|On Screen Display**.

Also Infra red control can be enabled. This will however the projection module exclude from being controlled by the OverView Control Manager.



For stability reasons and for optimization a projection module can EITHER be controlled by the OCM, OR by Infrared Remote Control.

Selecting software control (OCM) disables IR Remote Control and vice versa.



Please refer also to the respective commands in the reference section, chapter 7.

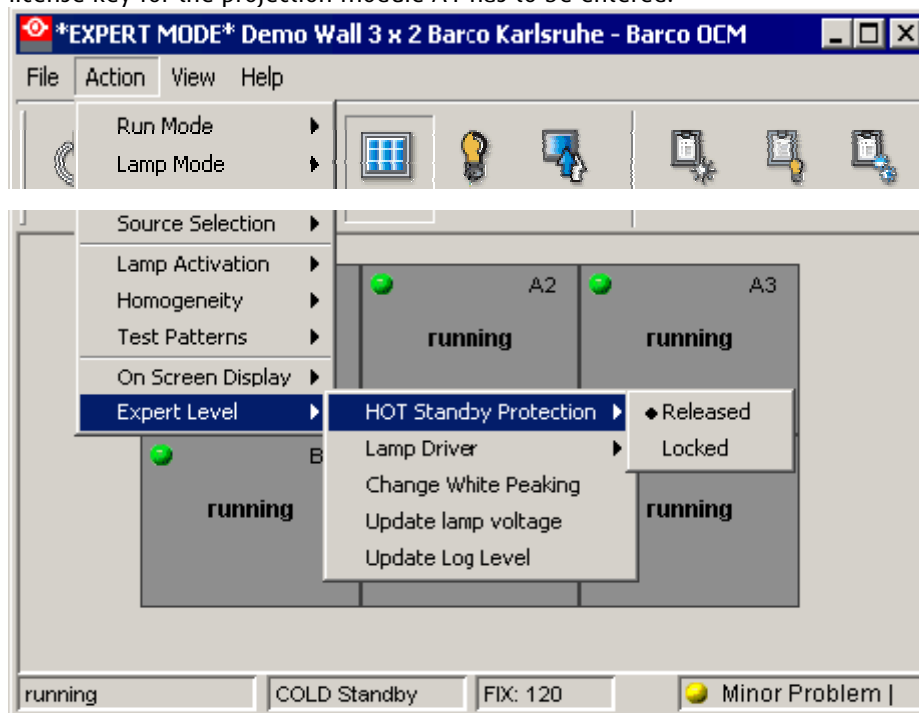
3.3 OCM – For Barco technicians

For customer support engineers the OVERVIEW CONTROL MANAGER offers additional commands to release the hot standby operation mode, to introduce the actual lamp driver to a new display wall, to update lamp driver information after an upgrade of the entire display wall, to change the white peaking factor, to measure the lamp voltage, update the log level, re-calibrate lamps, disable overtemperature protection and to disable the optical dimmer.

Authorization is given by entering the password of the **Service** mode.

3.3.1 Release and lock hot standby operation mode

To release and to lock the hot standby operation mode, after the selection of the respective command the license key for the projection module A1 has to be entered.



Make sure that you inform BCD customer support center that hot standby has been released. This information has to be added to the customer data!

3.3.2 Lamp Driver

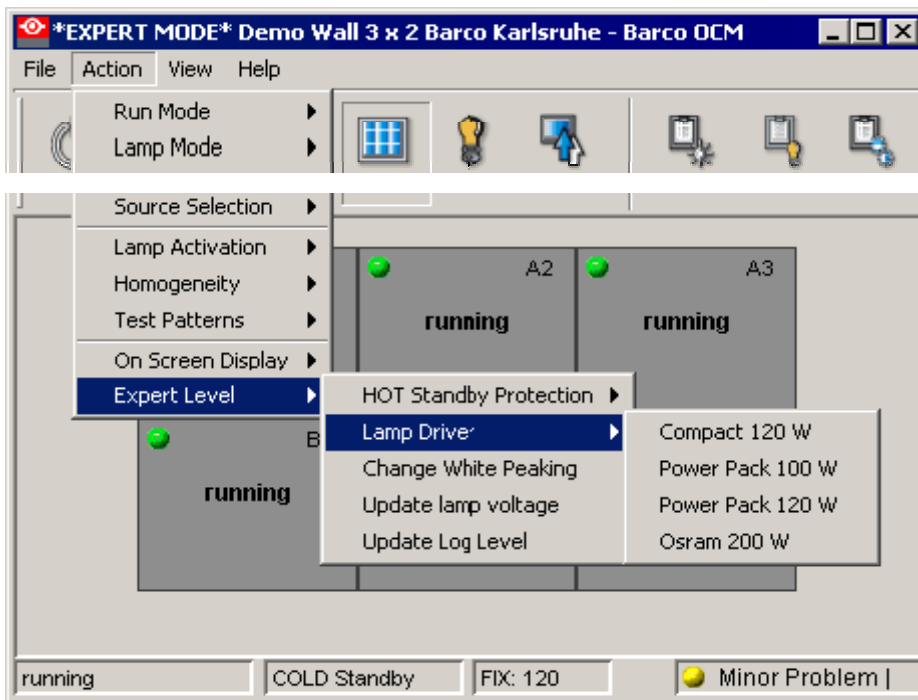
The lamp driver information of a new projection module is set to Power Pack 120W (default).

When the display wall is set up, before taking it into operation, the actual lamp driver has to be introduced.

In case it is really Power Pack 120W, nothing has to be done. In case of Power Pack 100W, or Osram 200W the lamp driver has to be corrected.

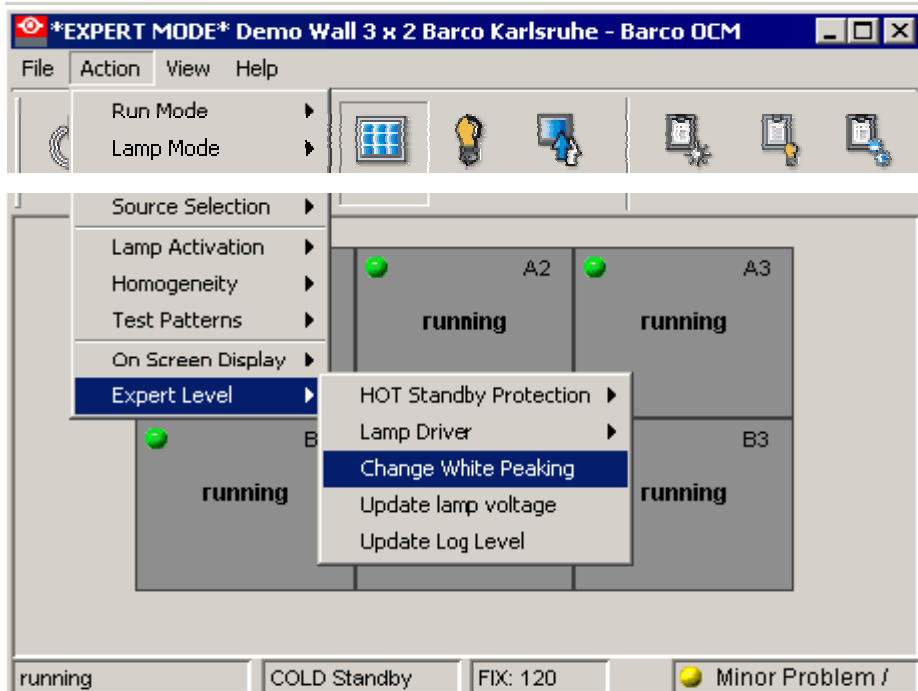
Select the command **Action|Lamp driver** and select the correct lamp driver for this display wall.

This command switches the lamp driver information of every projection module into the selected one.

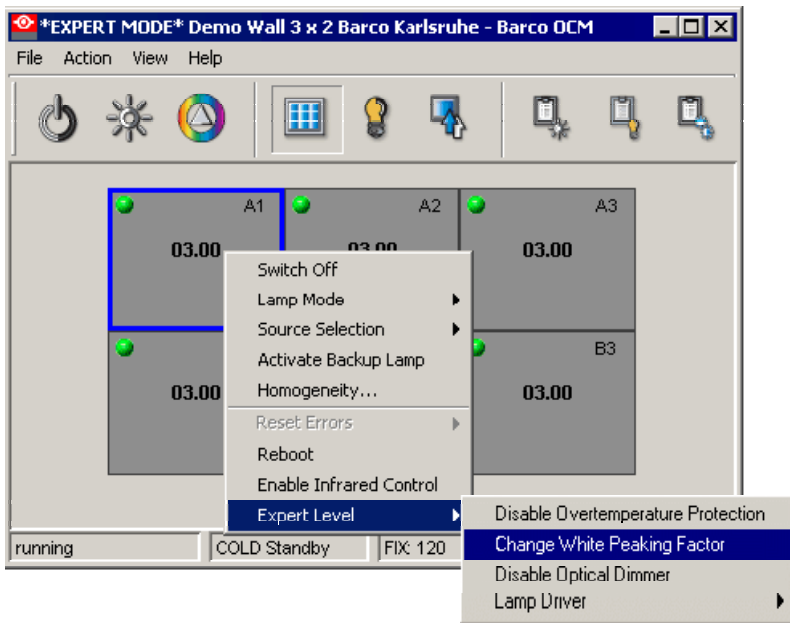


This command might only be selected if all projection modules of the entire display wall have the same lamp driver! Never select this command without first having checked that all illumination units employ the same lamp driver.

3.3.3 Change White Peaking



This command allows you to change the white peaking factor of all projection modules, the respective command for a single projection module is in the context menu of the grid in Module view:

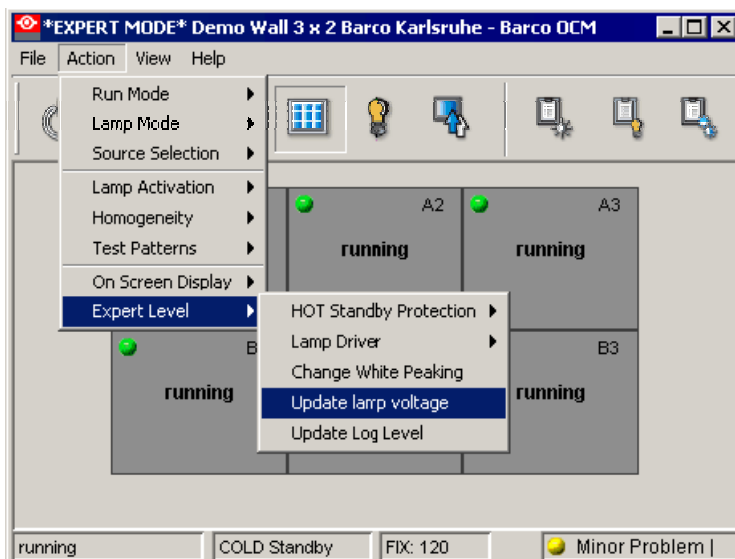


Changing the white peaking factor has impact on the color adjustment: a color adjustment is only valid for the white peaking factor it has been created with. Handle with care!

3.3.4 Update lamp voltage

Lamp voltage might be an indicator about the health of the lamp. Therefore it might be useful to monitor and check it.

In the **Lamp property** table there is already a column foreseen to show the lamp voltages. However, their measurement has to be triggered by means of the command **Action|Expert Level|Update Lamp Voltage**.



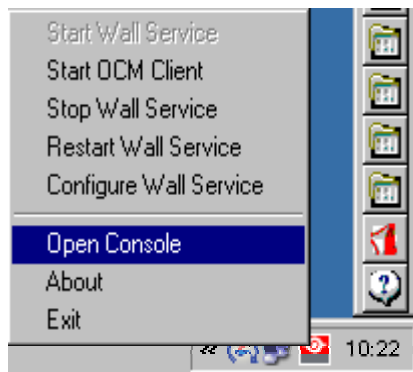
Please note that lamp voltage depends on the lamp driver!

As a rule of thumb we can say: the higher the lamp voltage, the higher the possibility that the lamp will fail soon. However, the lamp voltage depends on the lamp driver, and also its measurement is not accurate enough to give a clear message when a lamp will really fail.

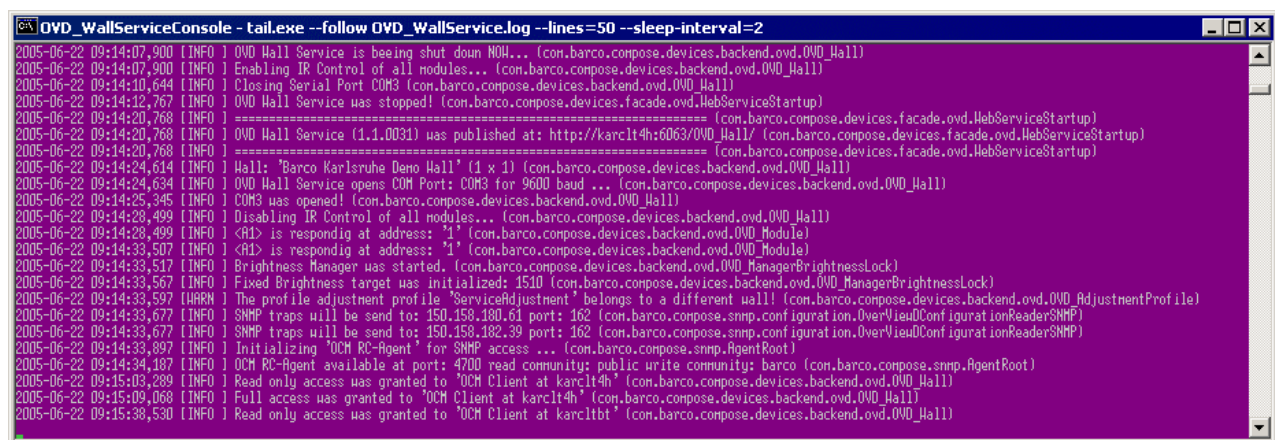
3.3.5 Update log level

OVERVIEW CONTROL MANAGER provides a log console to supervise the system.

To display the **OVD_WallService Console**, select **Open Console** from the context menu of the OCM icon in the

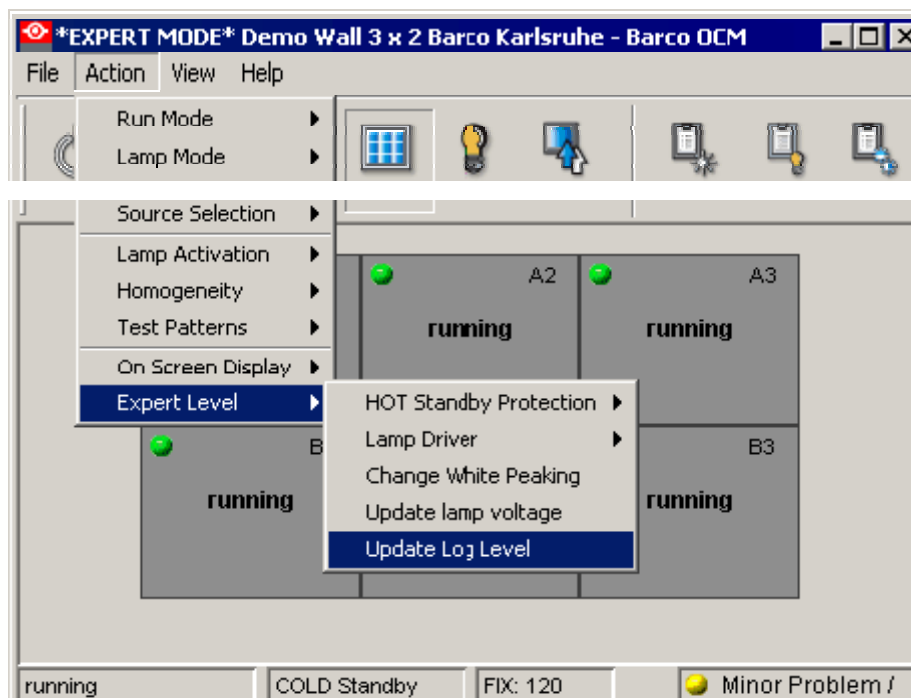


Subsequently the console window is displayed:



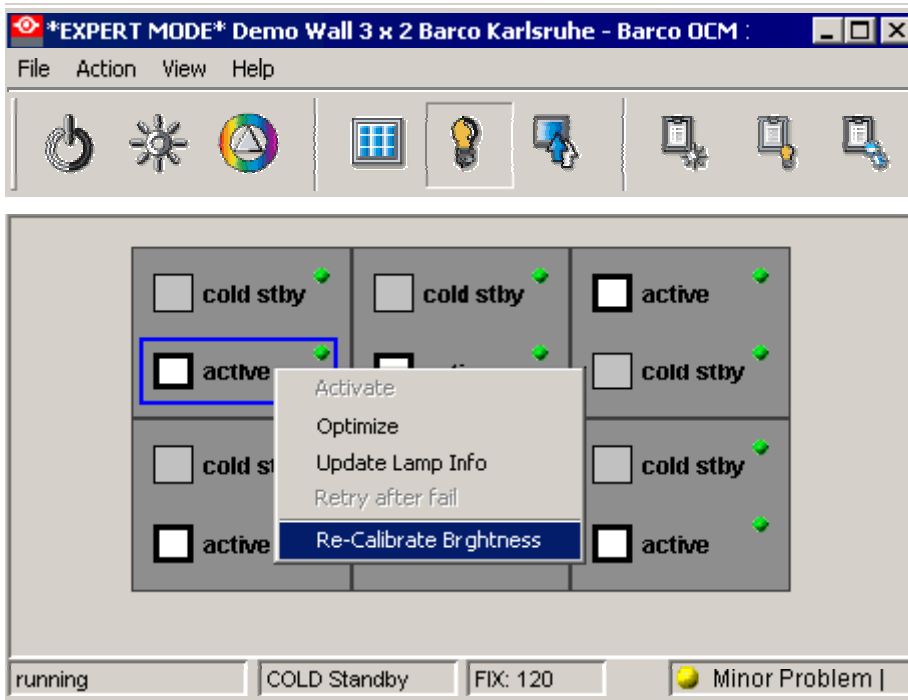
The features which are supervised and logged can be modified by editing the file **OVD_WallService_log4j**. This file is located in the folder **...\Barco Overview Control Manager\Service** on the workstation the OVD wall service is running.

After updating this file, use the command **Update Log Level** to activate the modifications or restart the service.



3.3.6 Re-calibrate brightness

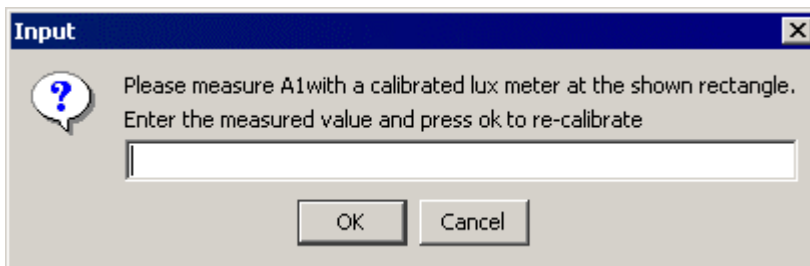
Although **re-calibrate** is a command located in the context menu of the lamps in **Lamp View**, it should not be performed for the selected lamp only, but for all lamps, active lamps and backup lamps, of the entire display wall. This can only be skipped if the measurement device for re-calibration is about the same as the one used for the initial calibration (probably done with CAST).



Re-calibration resets the **brightness correction factor**, and it requires that the **lamp optimization procedure** has been run.

Then a properly calibrated lux meter has to be centered on the screen, the brightness value has to be measured and noted.

Finally this measured value has to be entered in the dialog popping up after the command **Re-Calibrate Brightness** has been selected:



Please refer also to the reference section, chapter 7, [Error! Reference source not found.](#)

3.4 Known issues

If OVERVIEW CONTROL MANAGER service is running, to access the device control of APOLLO API the **Barco OCM RC Agent** has to be enabled (**Configure Overview Control Manager**).

However, the OVERVIEW D projection modules can either be controlled by APOLLO or by the OCM. Therefore make sure that in the Barco RC Agent OVD control is disabled.



The Barco RC Agent and the Barco OVD wall service shall not run simultaneously. To make use of device control in Apollo wall management software activate the Barco OCM RC Agent.

In Apollo rel. 1.7 and earlier, in addition the read community has to be changed to "ulcibp" and the write community to "acorb".

In Apollo rel. 1.8 or higher no changes of the read and write community are required.

Since the OVERVIEW CONTROL MANAGER disables IR remote control of the projection modules, in case the OCM crashes, IR remote control of the projection modules has to be manually re-enabled, either by RS232 or by clicking about 10 seconds on the ON/RES button on the rear side of the projection modules.

(In case the OCM is programmatically shut down, IR remote control will automatically be re-enabled!).

Minimum and maximum brightness of a lamp are not stored in a file. In case the OCM is shut down, after re-start, all lamps have to be running at least once to enable the OCM to retrieve min. and max. brightness.

4 Configuration of the projection modules

4.1 Projector address and cabling

OVERVIEW CONTROL MANAGER 1.2 supports projection systems of the OVERVIEW D series with firmware version 2.22 (XGA, SXGA) and 3.4 (XGA, SXGA+). If required, first update the firmware (use "Serial Programmer").



Projection units with only one DVI interface require firmware version 2.x and must not be updated to firmware version 3.x!

The individual projection systems have to be assigned a unique projector address and to be connected in an RS232 chain.



It is mandatory that the projector address complies with the following rule:

Seen from front:

The most left projector of the most upper row has the projector address 1, the second left projector of the most upper row the address two and so on, until all projectors of the most upper row have got their address accordingly. Subsequently proceed with the second upper row, also start with the most left projector.

The diagrams below show a display wall seen from front, the projector addresses and the two allowed ways of remote control cabling!

COM1

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

COM1

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	32

COM1: the COM-interface of the PC running the OVERVIEW CONTROL MANAGER service!



With OverView DG and OverView DR chains with up to 32 projectors are supported, with firmware 3.x chains up to 254 projectors are supported.

Release 1.0, release 1.1, and release 1.2, release 1.3 of OVERVIEW CONTROL MANAGER do not support multiple chains.

To assign a projector address, use the IR Remote Control Unit and activate the **Service** menu of the OSD (cf. Installation manual of OverView D). In the **Service** menu, select **Projector Address**.

The projector address and the common RC5 address is displayed.

Projector addresses

Projector address

Common RC5 address

To change a value:

- Move the cursor key to the respective field.
- Enter the new value by means of the numeric keys of the IR Remote-Control.

4.2 Baud rate

The baud rate depends on the firmware of the projectors.

Projectors with firmware 2.x require a baud rate of 9600.

Projectors with firmware 3.x require a baud rate of 115000.

Please make sure that the RS 232baudrate of the projection units are set to the correct value!

- In the OSD, navigate to **Brightness**.
- Enter the access code for the **Service** menu and press **Enter**
- In the **Service** menu, select **RS232 Baudrate**
- Make sure that **9600** is marked with a white dot in case of firmware 2.x or **115000** in case of firmware 3.x.



Firmware 2.x requires a baudrate of 9600!

5 OverView Control Manager on Linux platform

5.1 System requirements



Release 1.0 and Release 1.1 of OVERVIEW CONTROL MANAGER support Windows platforms only. Starting with Release 1.2, also Linux is supported.

- Minimum: PC with at least PIII, 400 MHz, 256 MB.
For server installation recommended: PIV, 2 GHz, 512 MB
For client installation recommended: PIII, 1 GHz, 512 MB

5.2 Best practice



It is recommended to first read the readme file located on the CD-ROM!

You have to get root to install OVERVIEW CONTROL MANAGER software.

5.3 Additional requirements

The installation procedure starts the vi editor to modify the configuration file. Make sure that the vi editor is available on the system!

In addition the desktop resolution should be at least XGA (1024x768), and the color depth set to 24bit!



For color adjustment, a color bitmap is used. In case the color depth of the desktop is only 16 bit, the colors of this bitmap will never match the color impression of the projection module thus making it impossible to adjust the projection modules in color!

5.4 Installation of the OverView Control Manager on Linux

You need to get root to install the software.



When installing OverView Control Manager, starting the installation will automatically de-install any older version. Files which had been changed will not be removed, cf. [Uninstalling the OverView Control Manager](#).

OverView Control Manager will automatically install the required JRE.
On Linux system, always the Server and the Client software is installed. In case no Server software is required, it can be deactivated by removing it from the autostart, cf. [Disable / re-enable automatic startup of the OVD wall service](#).



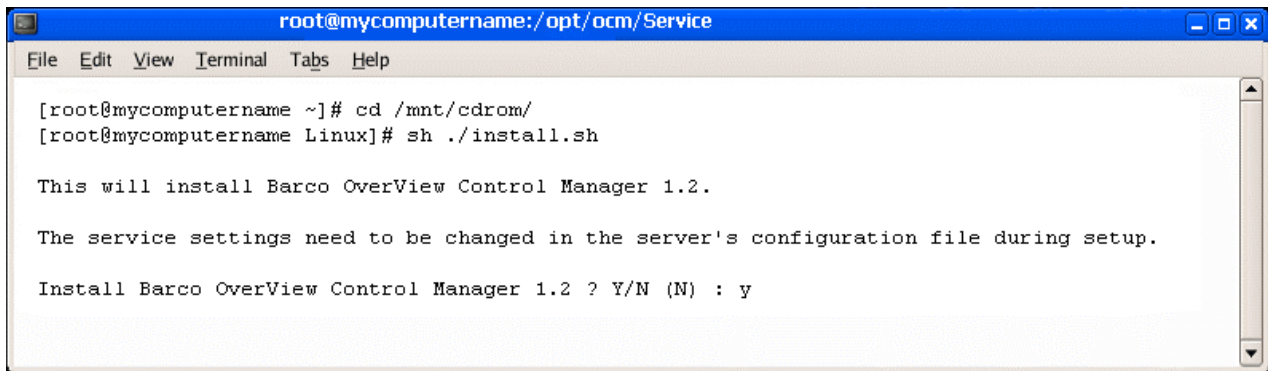
On a TransForm A X-Terminal you might first need to mount the CD by using the following command:

```
mount /dev/cdrom /mnt/cdrom
```

- The CD-ROM includes the required files to install OverView Control Manager on Linux:
install.sh
ocm-1.02-xxxx.i386.rpm
- Change the directory to **/mnt/cdrom**
- Open a console and get root

- Run the install script. It is located on the root directory of the CD-ROM. To run the script regardless to the set file attributes, type the command
sh ./install.sh.

The following message is displayed.



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help

[root@mycomputername ~]# cd /mnt/cdrom/
[root@mycomputername Linux]# sh ./install.sh

This will install Barco OverView Control Manager 1.2.

The service settings need to be changed in the server's configuration file during setup.

Install Barco OverView Control Manager 1.2 ? Y/N (N) : y

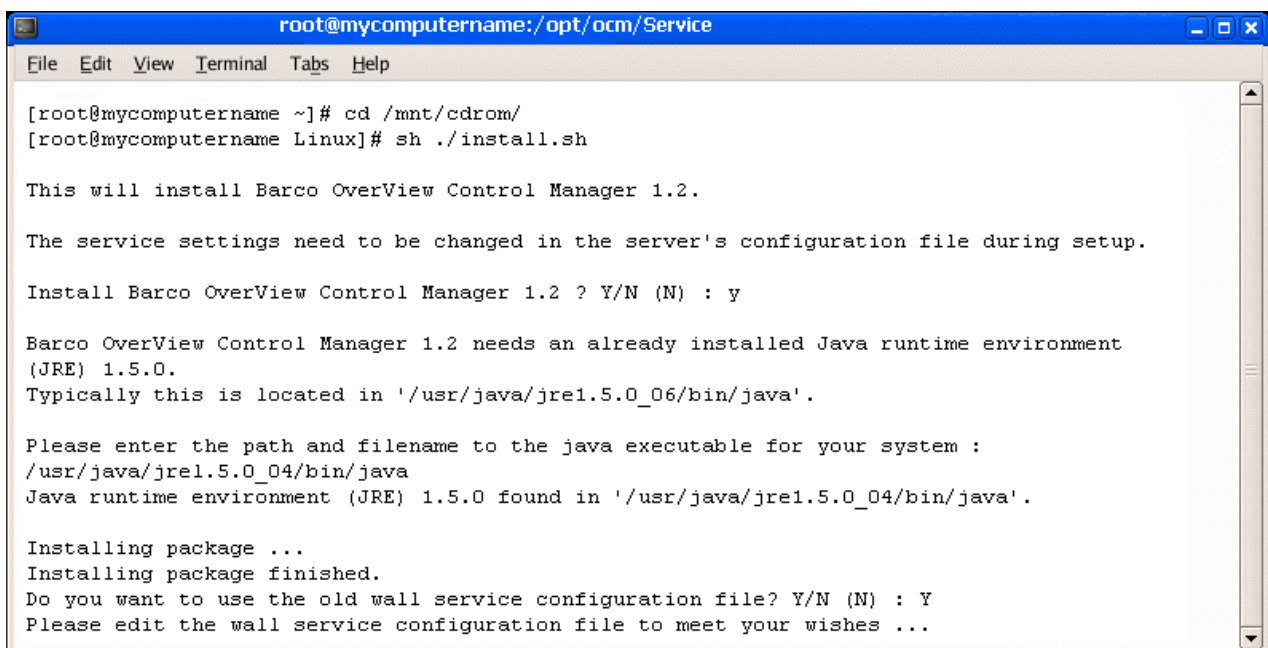
```

To install OverView Control Manager, type **Y** (or **y**).



The default value is always indicated in brackets and will be applied if you simply press ENTER.

In case of a previous installation of the OverView Control Manager, the customized configuration file **OVD_WallService.xml** has been kept during the de-installation of the previous version (cf. [Uninstalling the OverView Control Manager](#)) and been renamed to **OVD_WallService.xml.rpmsave**. The setup procedure asks if this configuration file is to be used.



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help

[root@mycomputername ~]# cd /mnt/cdrom/
[root@mycomputername Linux]# sh ./install.sh

This will install Barco OverView Control Manager 1.2.

The service settings need to be changed in the server's configuration file during setup.

Install Barco OverView Control Manager 1.2 ? Y/N (N) : y

Barco OverView Control Manager 1.2 needs an already installed Java runtime environment
(JRE) 1.5.0.
Typically this is located in '/usr/java/jre1.5.0_06/bin/java'.

Please enter the path and filename to the java executable for your system :
/usr/java/jre1.5.0_04/bin/java
Java runtime environment (JRE) 1.5.0 found in '/usr/java/jre1.5.0_04/bin/java'.

Installing package ...
Installing package finished.
Do you want to use the old wall service configuration file? Y/N (N) : Y
Please edit the wall service configuration file to meet your wishes ...

```

If the old wall configuration file is to be used, the installation procedure renames the file **OVD_WallService.xml.rpmsave** to **OVD_WallService.xml**.

Setup continues. The file **OVD_WallService.xml** (either the default one installed by the rpm package, or the old one of a previous configuration) is automatically opened by the **vi** Editor to allow changing the settings (as already indicated at the beginning of the installation):

Carefully read the explanations given at the beginning of the file, and then scroll down to the section where the configuration is specified.

The configuration section includes the following settings:

Setting	description
Width	Number of columns of the display wall (horizontal cubes)
Height	Number of rows of the display wall (vertical cubes)
COM_port	COM Port OCM uses for communication, change to /dev/TTY0 to use COM1 with Linux
Baudrate	Baud rate of RS232 communication, 9600 mandatory for firmware 2.x, for firmware 3.x also higher baud rates are possible
Owner	Name of customer
Location	Name of location
Wallname	Friendly name of the display wall
ip_port	TCP/IP Port the OCM uses for communication, default port is 6063
Demo	Allows running the OCM in demo mode, e.g. simulating a display wall
Rc_agent	Indicates whether the Barco RC Agent shall also run. In case the Barco RC Agent has been selected, it has also to be configured, cf. Configuration of the Barco RC Agent
Passwd	Password of the Service (and Expert) mode, default is barco (all small!)
Passwd_operator	Password of the Operator mode, default is barco (all small!)
brightness_tolerance	Percentual brightness difference that must be reached before OCM indicates that a projector did not reach a brightness target. Default value = 5.
poll_interval_hf	Polling intervall for frequently changing paramters, default value = 2 (seconds)
poll_interval_mf	Polling intervall for less frequently changing paramters, default value = 10 (seconds)
bl_check_interval	Period the brightness manager waits between updates of the brightness target, default value = 25 (seconds)
ddp_err_auto_restart	Only for SXGA resolution! If set to "1", a hotfix is activated to switch the projection modules off and on again in case a ddp master/slave communication occurs, cf. DDP communication error

```

root@mycomputername:/mnt/cdrom
File Edit View Terminal Tabs Help

    to read-only functionality unless they specified this password.
    To remove password protection set passwd=""

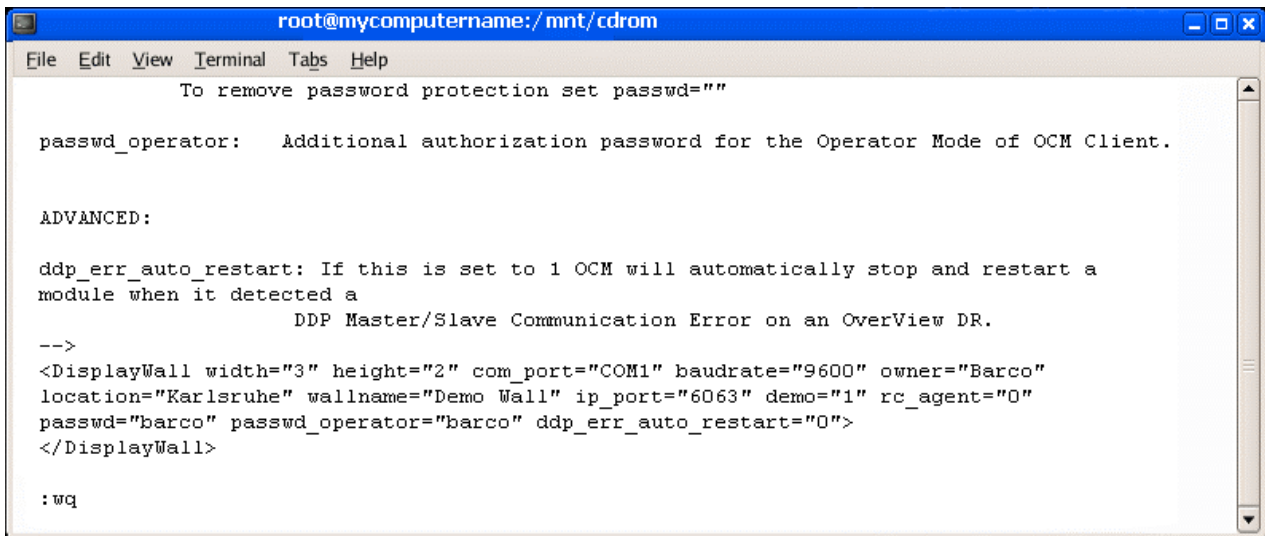
passwd_operator:    Additional authorization password for the Operator Mode of OCM Client.

ADVANCED:

ddp_err_auto_restart: If this is set to 1 OCM will automatically stop and restart a
module when it detected a
                    DDP Master/Slave Communication Error on an OverView DR.
-->
<DisplayWall width="3" height="2" com_port="COM1" baudrate="9600" owner="Barco"
location="Karlsruhe" wallname="Demo Wall" ip_port="6063" demo="1" rc_agent="0"
passwd="barco" passwd_operator="barco" ddp_err_auto_restart="0">
</DisplayWall>

```

- Type **i** to activate the insert mode of the **vi** editor.
- Adjust the settings according the actual requirements.
- Type **:wq** to save the adjusted settings and to exit the **vi** editor.



```

root@mycomputername:/mnt/cdrom
File Edit View Terminal Tabs Help

    To remove password protection set passwd=""

passwd_operator:    Additional authorization password for the Operator Mode of OCM Client.

ADVANCED:

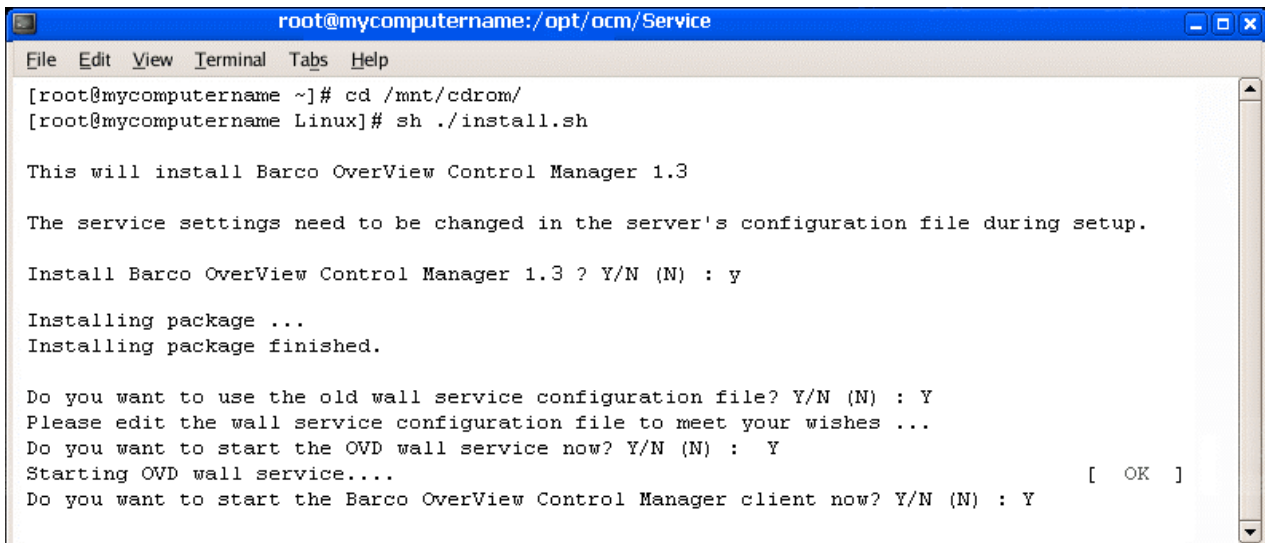
ddp_err_auto_restart: If this is set to 1 OCM will automatically stop and restart a
module when it detected a
                    DDP Master/Slave Communication Error on an OverView DR.
-->
<DisplayWall width="3" height="2" com_port="COM1" baudrate="9600" owner="Barco"
location="Karlsruhe" wallname="Demo Wall" ip_port="6063" demo="1" rc_agent="0"
passwd="barco" passwd_operator="barco" ddp_err_auto_restart="0">
</DisplayWall>

:wq

```

Setup asks if you want to start the OVD wall service:

Type **y** to start the OVD wall service. Then you are asked if to start the OverView Control Manager Client:



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help

[root@mycomputername ~]# cd /mnt/cdrom/
[root@mycomputername Linux]# sh ./install.sh

This will install Barco OverView Control Manager 1.3

The service settings need to be changed in the server's configuration file during setup.

Install Barco OverView Control Manager 1.3 ? Y/N (N) : y

Installing package ...
Installing package finished.

Do you want to use the old wall service configuration file? Y/N (N) : Y
Please edit the wall service configuration file to meet your wishes ...
Do you want to start the OVD wall service now? Y/N (N) : Y
Starting OVD wall service.... [ OK ]
Do you want to start the Barco OverView Control Manager client now? Y/N (N) : Y

```



As default, OVD wall service will always be started when booting the system.
If required, disable this behavior, cf. [Disable / re-enable automatic startup of the OVD wall service](#).

5.5 Start parameter for the OverView Control Manager client application

Starting the OCM client by typing **x** during the setup procedure starts the OCM client in **Service** mode without any start parameters (switches).

To customize the starting of the client application, type **x**, and then enter the start command including the desired parameters manually.

The following lists comprises the parameters and switches to start OCM client:

Switch	default	description
-language	en	language for the client as digits ISO-639 code (en,de,ja,es), cf. Localization if this parameter is specified it must be at the first position in the parameter list
-hostname	Localhost	Computer name or network address of the wall OVD wall service the client connects to
-passwd	barco	Password to operate the OverView Control Manager (otherwise it starts read-only) Please mind: the password is case sensitive! The default password barco is all small!
-ip_port	6063	Port the web service uses
-service		Starts the client application in service mode
-refreshrate	5	Poll rate the OCM client asks the OVD wall service for information
-small		Starts the OCM in small module view to display large display walls without the need to use scrollbars

To start the OCM client manually including start parameters,

- Change to the Client directory
- Enter `./StartClient.sh -parameter1 -parameter2 - parameter3`



```

root@mycomputername:/mnt/cdrom
File Edit View Terminal Tabs Help

[root@mycomputername ~]# cd /opt/ocm/Client/
[root@mycomputername Client]# ./StartClient.sh -service

```

5.6 Additional commands for the OVD wall service

5.6.1 Check if the OVD wall service is running

As default, the OVD wall service is started when booting the system. To check if the service is running, use the following command:



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help

[root@mycomputername Service]# ps ax | grep ovd_wallservice

 3664 pts/1    Sl      0:02 /usr/java/jre1.5.0_04/bin/java -classpath DeviceAgent
Lib.jar:OVD_DeviceAgent.jar:OVD_WallService.jar:../lib/log4j-1.2.9.jar:../lib/co
mm.linux.jar:../lib/jcl.jar:../lib/snmpagent.jar:../lib/xercesImpl.jar:../lib/wa
sp_embedded/server_java60/lib/wasp.jar -Djava.library.path=../lib -Dwasp.location
n=../lib/wasp_embedded/Default_Client_Profile_6_0_ com.barco.sgcm.ovd_wallservi
ce.facade.WebServiceStartup
 3684 pts/1    R+     0:00 grep ovd_wallservice

[root@mycomputername Service]#

```

In case the wall service is running, the systems shows a message similar the one showed in the screenshot.

In case the wall service is not running, only the line including `grep ovd_wallservice` is displayed.

5.6.2 Disable / re-enable automatic startup of the OVD wall service



On Linux systems, OverView Control Manager Release 1.2 is always installed completely (server and client). If only the client is required, disable the automatic startup of the OVD wall service!

After the installation, the OVD wall service is set to start when booting the system.

If required, this behavior can be disabled.

- Get root.
- Enter the following 3 commands:



```

root@mycomputername:/opt/ocm/service
File Edit View Terminal Tabs Help

[root@mycomputername Service]# rm -f /etc/rc.d/rc3.d/S96ocmservice
[root@mycomputername Service]# rm -f /etc/rc.d/rc5.d/S96ocmservice
[root@mycomputername Service]# rm -f /etc/rc.d/init.d/ocmservice

```

To re-enable automatic startup of the OVD wall service when the system boots (after it has been disabled):

- Get root, and change to **/opt/ocm/Service**.
- Enter the following 3 commands:



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help


[root@mycomputername Service]# ln -s ocmservice /etc/rc.d/init.d/ocmservice
[root@mycomputername Service]# ln -s ../init.d/ocmservice /etc/rc.d/rc3.d/S96ocmservice
[root@mycomputername Service]# ln -s ../init.d/ocmservice /etc/rc.d/rc5.d/S96ocmservice

```

5.6.3 Start / stop / restart the OVD wall service

To manually start, stop and restart the OVD wall service, change to **/opt/ocm/Service** and use the following commands.

Please note: the command **restart** is a sequence of the commands **stop** and **start**.



```

root@mycomputername:/opt/ocm/Service
File Edit View Terminal Tabs Help

[root@mycomputername Service]# ./ocmservice start
Starting OVD device service ... [ OK ]

[root@mycomputername Service]# ./ocmservice stop
Stopping OVD device service ... [ OK ]

[root@mycomputername Service]# ./ocmservice restart
Stopping OVD device service ... [ OK ]
Starting OVD device service ... [ OK ]

```

5.6.4 Check the log file

The OverView Control Manager log files (both for the OVD wall service and for the client) are located in the directory **/opt/ocm/log**.

To check the files, change to **/opt/ocm/log** and type

The files can be checked using the command **tail -f ./OVD_WallService.log**



```

root@mycomputername:/opt/ocm/log
File Edit View Terminal Tabs Help

[root@mycomputername log]# tail -f ./OVD_WallService.log

```

5.6.5 Uninstalling the OverView Control Manager

To uninstall the OverView Control Manager, proceed as follows:

- Open a console
- Get root
- Enter **rpm -e ocm**

RPM will remove the OverView Control Manager and all related files from your system.



Files which had been changed since the installation are not removed!

The following list shows the files which are not removed:

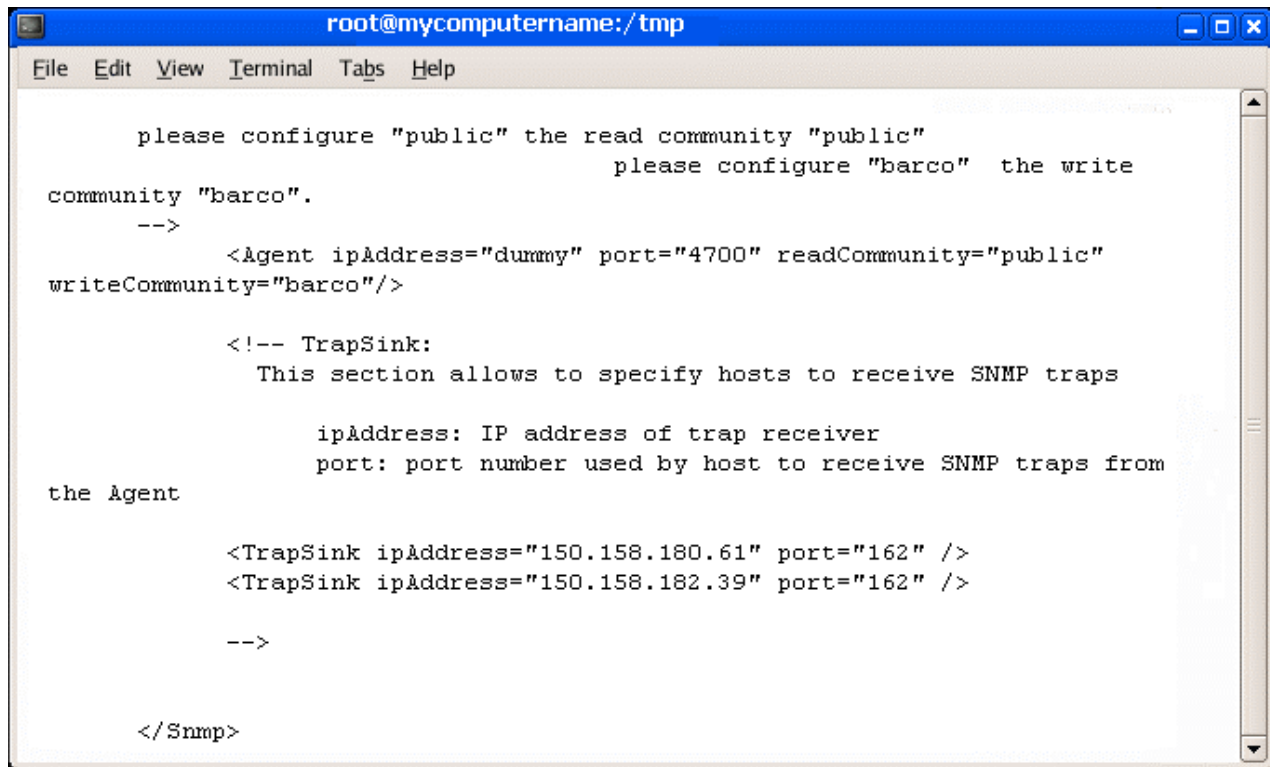
- /opt/ocm/Client/OCM_Client.log4j
- /opt/ocm/Service/OCM_RCAGENT.xml
- /opt/ocm/Service/OCM_RCAGENT.xsd
- /opt/ocm/Service/OVD_WallService.xml
- /opt/ocm/Service/OVD_WallService.log4j

The following files will never be removed by rpm uninstall routines:

- the directory /opt/ocm/Service/Adjustment and all files within
- the directory /opt/ocm/log and all the files within

5.7 Configuration of the Barco RC Agent

In case the Barco RC Agent also runs on the system, the SNMP-interface of OVD-Wall Service has to be configured. Edit the configuration file **/Service/ OCM_RCAgent.xml** to define the trap destinations:



```

root@mycomputername:/tmp
File Edit View Terminal Tabs Help

    please configure "public" the read community "public"
                                please configure "barco" the write
community "barco".
-->
    <Agent ipAddress="dummy" port="4700" readCommunity="public"
writeCommunity="barco"/>

    <!-- TrapSink:
        This section allows to specify hosts to receive SNMP traps

        ipAddress: IP address of trap receiver
        port: port number used by host to receive SNMP traps from
the Agent

        <TrapSink ipAddress="150.158.180.61" port="162" />
        <TrapSink ipAddress="150.158.182.39" port="162" />

    -->

</Snmpp>

```

6 OverView Control Manager on Windows platform

6.1 System requirements



Release 1.0 and Release 1.1 of OVERVIEW CONTROL MANAGER support Windows platforms only. Starting with Release 1.2, also Linux is supported.

- Minimum: PC with at least PIII, 400 MHz, 256 MB.
For server installation recommended: PIV, 2 GHz, 512 MB
For client installation recommended: PIII, 1 GHz, 512 MB
- Windows 2000 Service Pack 4 or later or Windows XP Professional Service Pack 2 or later
- Internet Explorer 6.0 SP1 or later



The setup of OverView Control Manager automatically installs the required JRE.

6.2 Best practice



It is recommended to first read the readme file located on the CD-ROM!

You need administrative privileges to install the OVERVIEW CONTROL MANAGER software.

In addition the desktop resolution should be at least XGA (1024x768), and the color depth set to 24bit!



For color adjustment, a color bitmap is used. In case the color depth of the desktop is only 16 bit, the colors of this bitmap will never match the color impression of the projection module thus making it impossible to adjust the projection modules in color!

6.3 Used ports

Per default, OVERVIEW CONTROL MANAGER uses the following port:

Application	ports
OverView Control Manager	TCP/IP port 6063

In case the port is already used, you can change it using [Configure Service](#).



With Windows XP SP2, the firewall is activated and all ports are closed! Make sure to open the used ports!

6.4 Setup

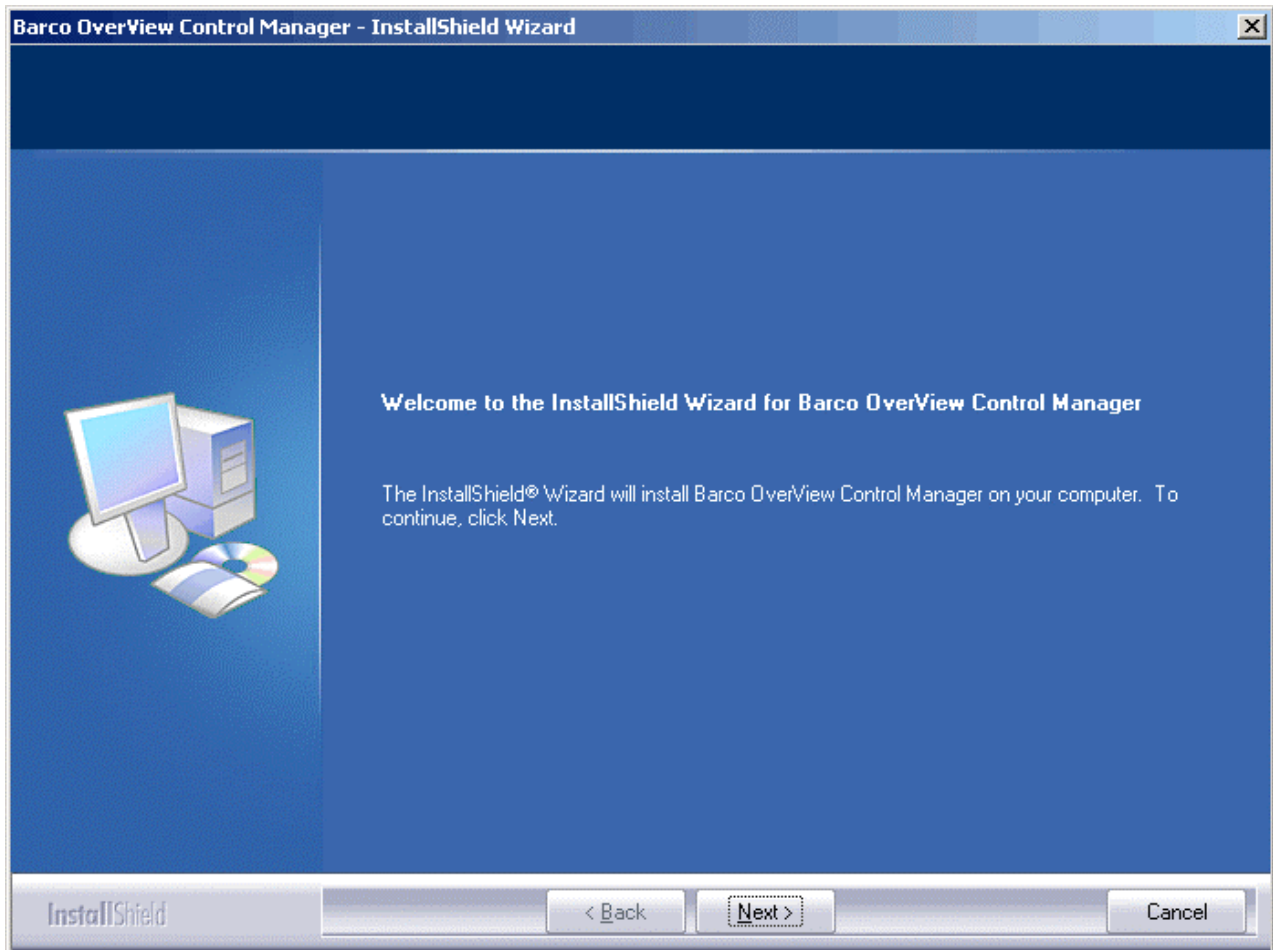
You need administrative privileges to install the software.



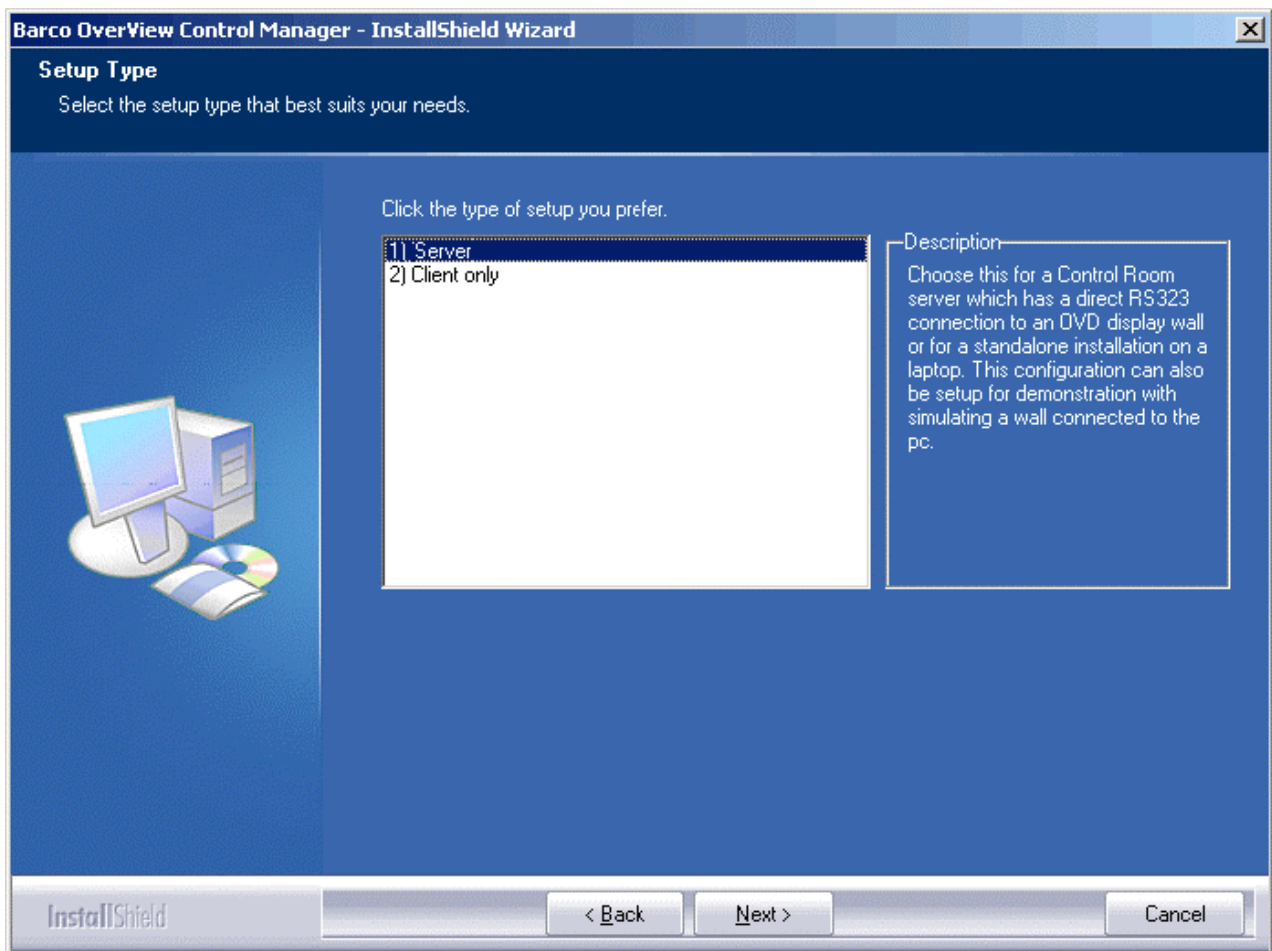
When installing OverView Control Manager, clicking on setup.exe will first de-install any older version.

Subsequently you have to run setup.exe again.

Place the CD into the CD drive and run **setup.exe**. The Install Shield Wizard will guide you through the installation process. Follow the displayed instructions.



There are two options to install the software:



Mode	description
Server	Installation of the server (OVD wall service) and client components (OCM client), the required libraries, logging utility, VB runtime and the user documentation. Also the Barco OCM RC Agent is installed.
Client only	Installation of the client components, the required libraries, VB runtime and the user documentation

Select the desired installation.

6.4.1 Server installation

If **Server** has been selected, server and client components are installed to allow testing the application on the server PC.

The configuration of the service is also part of the setup. Therefore during installation, the **Configure OverView Control Manager** dialog pops up:

Enter **Name**, **Owner** and **Location** of the display wall as well as the configuration (**Columns**, **Rows**). Select the **Serial port** the first projection system is connected to.

The **baud rate** has to be set to 9600 in case the firmware version of the projection modules is 2.x.

The **baud rate** has to be set to 115000 in case the firmware version of the projection modules is 3.x



The information is stored in an XML file. Therefore the strings entered as Name, Owner, Location may not include the following characters (\ / : * ? " < > |).

IP Port shows the name of the Port the OVERVIEW CONTROL MANAGER web service uses. This port has to be opened (cf. [Used ports](#)). In case the port is already used by another application, enter a free port number!

If you want the application to run in **Demo Mode** (e.g. to get familiar with the menu bar and toolbar), check **Demo Mode**.



You can later always modify the OVD Wall Service using the shortcut Start|Barco OverView Control Manager|WallConfiguration. This will display this dialog.

Changes during operation will only be applied after the dialog has been closed (OK button) and the service has been manually restarted anew!

In case you want to run the Barco OCM RC Agent, select **SNMP** and enter the trap destination.

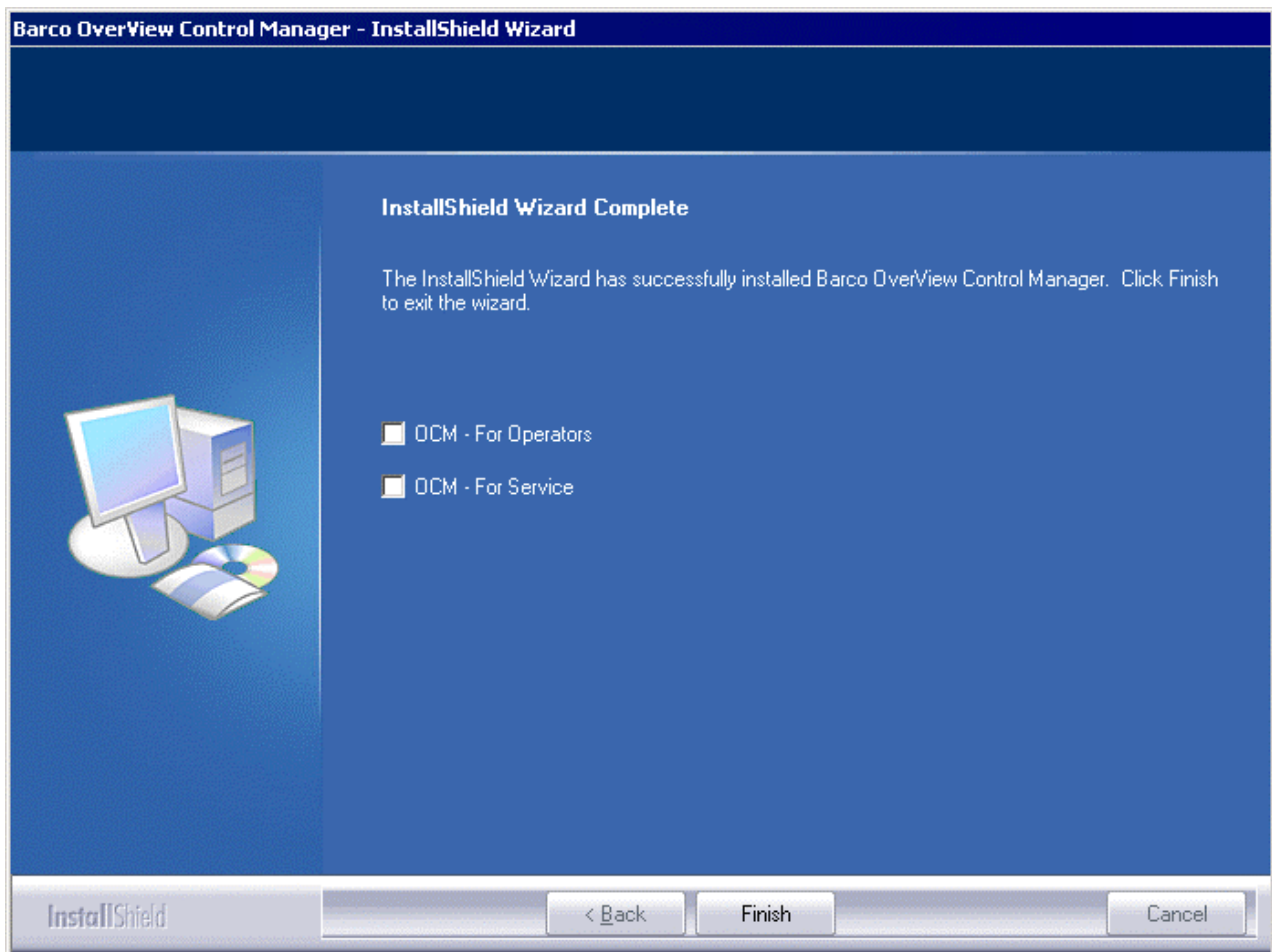
Enter your desired password for the Service mode and the Operator mode. The default password is barco (all small!)



The password prevents unauthorized personnel to manipulate the display wall. The default password is barco (all small)!

After you have quit the dialog, setup continues.

After the setup is completed, you have the option to start the application immediately. Select OCM - For Operators to start it in standard operation mode, select OCM - For Service to start it with extended functionality. Subsequently click **Finish**.

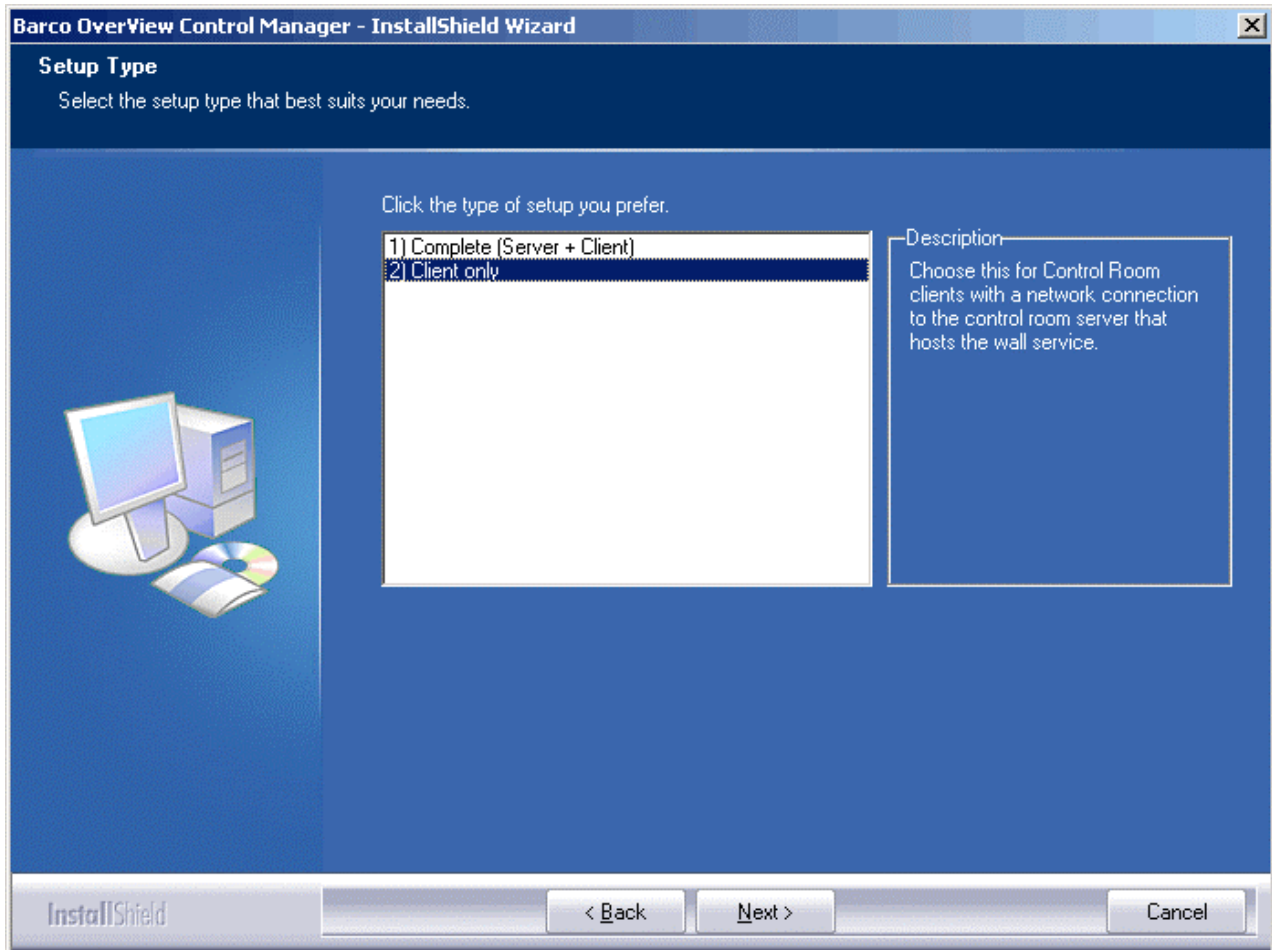


The setup procedure creates an icon of the OVD wall service in the system tray and starts the service (immediately after the "Configure OverView Wall Service" dialog has been closed).

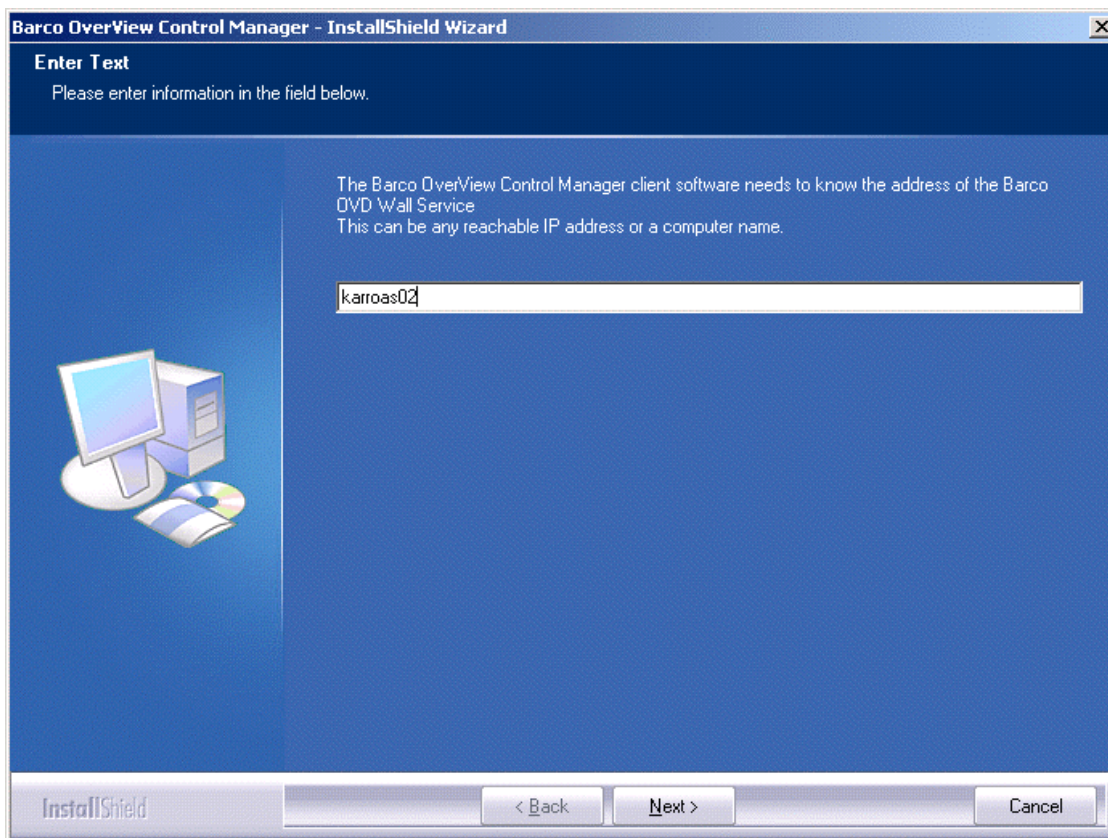
After being installed, the OVD WALL SERVICE will always start when booting the system.

If one of the operating modes is checked, OCM will be launched and run in the desired mode.

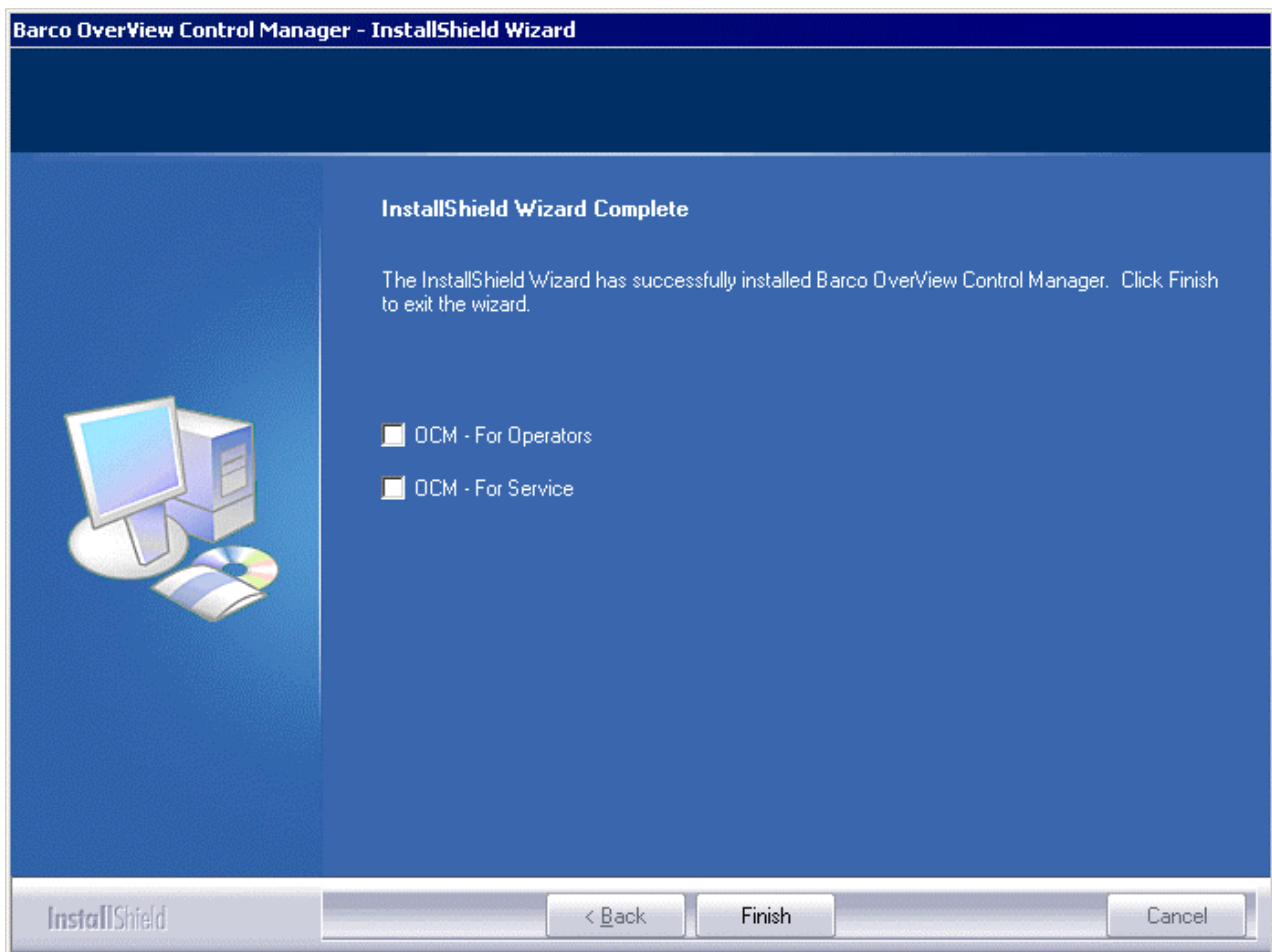
6.4.2 Client only installation



This option only installs the OCM client components on the computer. The OCM client then will access the OVD wall service on the server PC. Therefore this PC has to be introduced to the client application. A dialog pops up asking for the name of the PC running the **OVD Wall Service**. Either enter the IP address of this PC, or its friendly name in the Local Area Network.



Like with the installation of the OVD WALL Service, the last dialog of the Install Shield Wizard allows to launch the client application. Select OCM - For Operators to start it in standard operation mode, select OCM - For Service to start it with extended functionality.

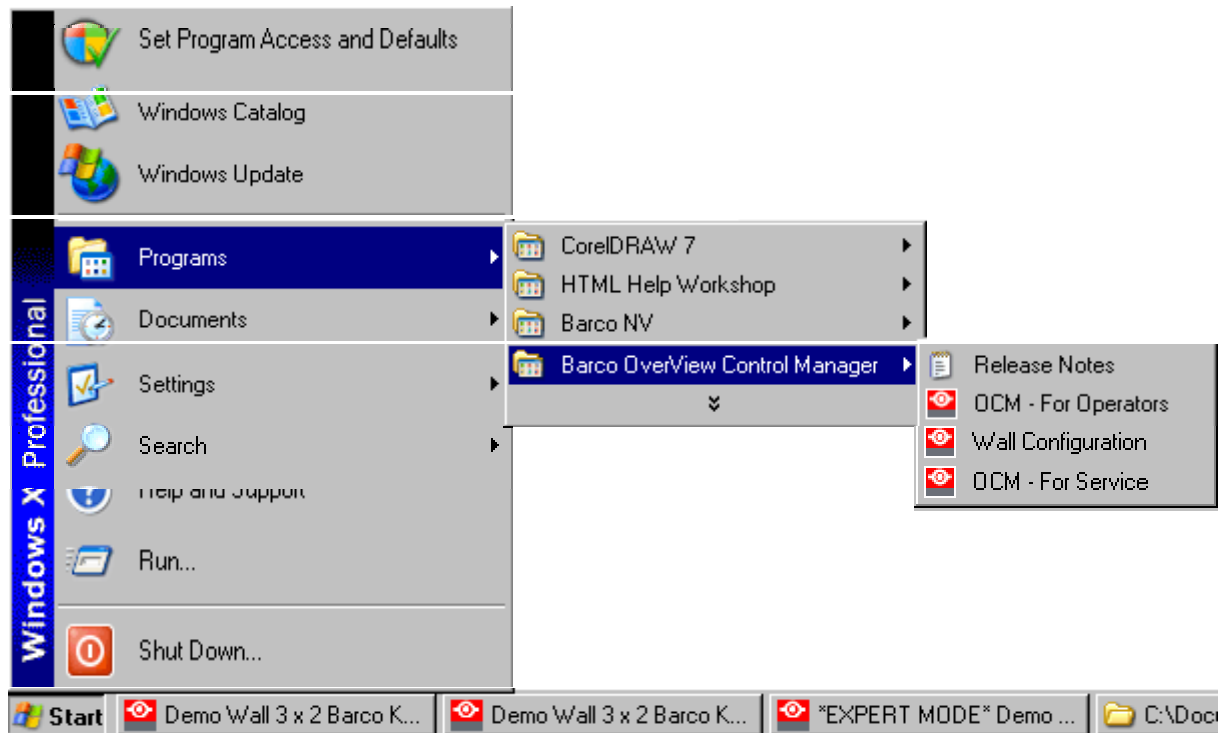


Subsequently click **Finish**.

6.5 Shortcuts created by the setup procedure

The setup procedure creates the shortcuts to start the client application in standard operator mode (**OCM – For Operators**) or in Service Mode (**OCM – For Service**)

In case of a complete setup (server components and client components), also a shortcut **Wall Configuration** is created.



Shortcut	action
Release Notes	Opens Notepad and displays the release notes
OCM – For Operators	Starts the client application in standard operator mode
OCM - For Service	Starts the client application in advanced operator mode.
Wall Configuration	Displays the respective dialog to enter name, location, configuration of the display wall as well as the serial port and the TCP/IP port. Allows to start the Barco OCM RC Agent and to define the trap sinks.

The shortcuts to launch the client application include the computer name or IP address of the workstation where the OVD WALL SERVICE is installed. In case the client and service run at the same PC, it's localhost.



In case the computer name or IP address of the PC running the service did change, edit the shortcut and modify accordingly!

The shortcut can include more than one parameter, e.g. you may want to also add the password: -passwd password_to_control_the_OCM

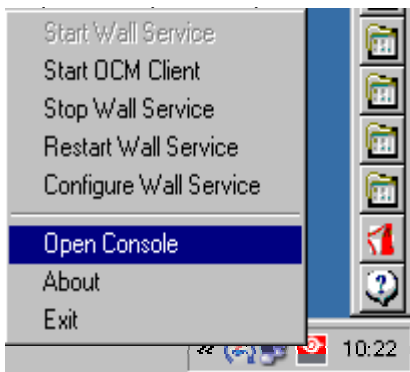
6.5.1 Configuration of the shortcut

The following table lists the command, switches and parameter. .

Switch	default	description
-language	en	language for the client as digits ISO-639 code (en,de,ja,es), cf. Localization if this parameter is specified it must be at the first position in the parameter list
-hostname	localhost	Computer name or network address of the wall OVD wall service the client connects to
-passwd	barco	Password to operate the OverView Control Manager (otherwise it starts read-only) Please mind: the password is case sensitive! The default password barco is all small!
-ip_port	6063	Port the web service uses
-service		Starts the client application in service mode
-refreshrate	5	Poll rate the OCM client asks the OVD wall service for information
-small	5	Starts the OCM in small module view to display large display walls without the need to use scrollbars

6.6 Icon created by the setup procedure

The installation of the OVD WALL SERVICE places an icon in the system tray. The context menu of this item allows to start, restart and stop the service as well as to configure the service (the **Wall Configuration** dialog is launched)



The icon does not indicate that the service is running!
The service is intended to start automatically when booting the system.

To check if the service is running, go to Start|Settings|Control Panel|Administrative Tools|Services. Check the entry "Barco OVD Wall Service"

6.7 OVD wall service

6.7.1 General

The OVD wall service runs on the workstation (probably the TRANSFORM A controller) connected via RS232 with the first projection unit of the display wall.



Barco RC Agent (as used in Apollo) and Barco OCM RC Agent can run simultaneously provided the Barco RC Agent does not use the COM port of the OCM!

In case you want to run the Barco OCM RC Agent start it using the dialog Configure OverView Control Manager, cf. [Configure Service](#)

Check if the Barco OCM RC Agent is running by the entry on the dialog File|Wall information|Wall service (Barco OCM RC Agent active/inactive)



All workstation in the network who can access the TansForm A and which have a client installation of the OverView Control Manager (OCM client) can access and control the display wall via the OCM client provided they know the password. Otherwise the OverView Control Manager application will be read-only.

As soon as the service is started, the IR Remote Control is automatically disabled for all projection units! In case IR Remote Control is required, this has to be explicitly selected in the OCM, either for the entire wall using **Action|On Screen Display|Infrared Control enabled (Service and Expert mode only!)**, or for a dedicated projection system by selecting this unit in the grid view and using the context menu entry **Enable Infrared Control (Service mode, Expert mode)**

When the OVD wall service is stopped, IR control is automatically enabled again. In case a test pattern has been applied to the wall by the OCM, this test pattern is also removed.

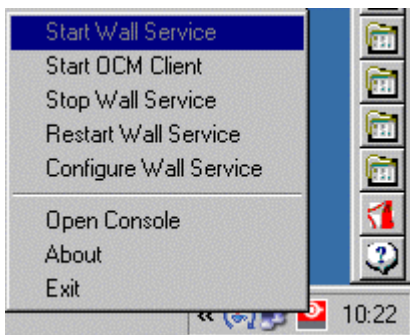
6.7.2 Start service

The OVD WALL SERVICE is started automatically when the system is booted.

To check if the service is really running or not, use **Start|Settings|Control Panel|Administrative Tools|Services**.

In case the service is not running, you can start it in the dialog **Start|Settings|Control Panel|Administrative Tools|Services**. Select the entry **Barco OVD Wall Service** and start the service using the context menu of this entry.

Or use the context menu of the icon in the system tray:

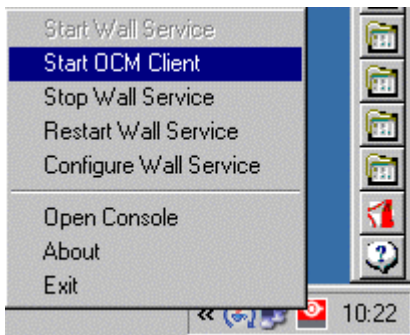


After starting the OVD wall service, the IR Remote Control is automatically disabled for the entire wall!

For stability reasons and for optimization projection module can not be controlled simultaneously by the OCM and the IR Remote Control!

6.7.3 Start OCM Client

Use this command to start the OCM Client in service mode (localhost).



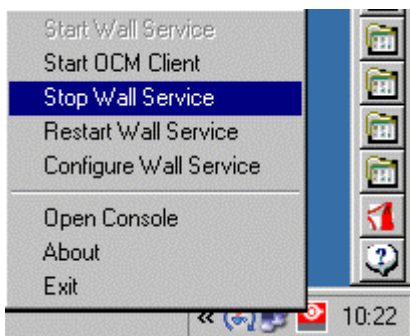
6.7.4 Stop Service

The OVD wall service can be stopped using the context menu of the icon in the system tray.

Alternatively the context menu of the service entry in the dialog **Start|Settings|Control Panel|Administrative Tools|Services** can be used.

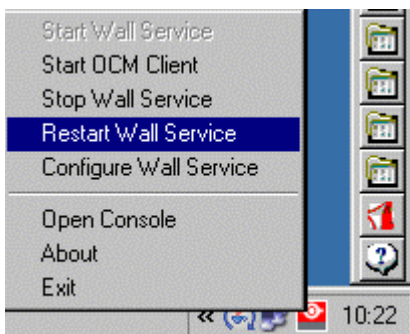


The icon in the system tray is no indication for a running service!
After stopping the service, the IR Remote Control is enabled again.



6.7.5 Restart Service

After having modified the **Wall Configuration**, use this command to re-start the service and to apply the modifications made in the **Wall Configuration** dialog!

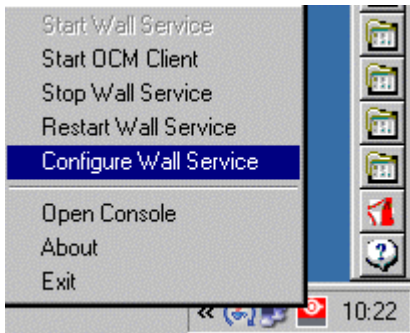


6.7.6 Configure Service

Use the shortcut **Start|Programs|Barco OverView Control Manager|Wall Configuration**.

Or click on the icon in the system tray.

Alternatively select **Configure Service** in the context menu of the icon in the system tray.



All possibilities to configure the service display the **Configure OverView Control Manager** dialog where the entries can be adjusted/modified.



Please note: Modifications will only be applied after re-starting the service.

Enter **Name**, **Owner** and **Location** of the display wall as well as the configuration (**Columns**, **Rows**). Select the **Serial port** the first projection system is connected to.

The baud rate has to be set to 9600 in case the projection modules have firmware 2.x

The baud rate has to be set to 115000 in case the projection modules have firmware 3.x.

IP Port shows the name of the Port the OVERVIEW CONTROL MANAGER web service uses. This port has to be opened (cf. [Used ports](#)). In case the port is already used by another application, enter a free port number!

If you want the application to run in **Demo Mode** (e.g. to get familiar with the menu bar and toolbar), check **Demo Mode**.

The **Password** prevents unauthorized users to manipulate the display wall via the OCM client. Different passwords for the **Service** mode and the **Operator** mode are supported. The default password is barco (all small).



The information is stored in an XML file. Therefore the strings entered as Name, Owner, Location may not include the following characters (\ / : * ? " < > |).

SNMP opens a dialog to enable and configure the Barco OCM RC Agent.

6.7.6.1 Barco OCM RC Agent

The Barco OCM RC Agent provides the compatibility with device management in APOLLO wall management software, especially to allow creating scenarios to control the OVERVIEW D projection systems.

The Barco OCM RC Agent can send traps to up to 5 trap sinks which can be added after the **Enable Agent** checkbox has been ticked.

The trap destinations can be entered as IP address or with the friendly computer name.

Configure SNMP

OCM RC Agent

☒ Enable Agent

Port: 4700 Read community: public Write community: barco

Trap destinations:

Add... Edit... Remove

OK Cancel

Subsequently the Add.. button gets enabled. Click to enter the trap destinations:

Add Trap Destination

Please enter a valid host name or IP address: Port: 162

OK Cancel

Please note:

The Barco OCM RC Agent does not support multiple serial chains and does not offer functionalities which have never been used in Apollo.

It is also not meant as an open API for OVD wall service!

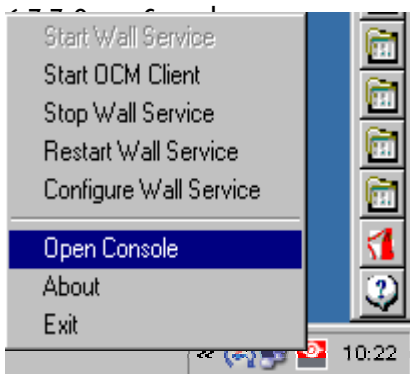
It is basically meant to provide compatibility with Apollo.

If OVERVIEW CONTROL MANAGER service is running, to access the device control of APOLLO API the Barco OCM RC Agent has to be enabled. The Barco RC Agent can run simultaneously provided it does not use the same COM port as the OCM. In the Barco RC Agent, control of the OverView D projection modules has to be disabled: they are controlled by the Barco OCM RC Agent.



In Apollo release 1.7 and earlier, the read community has to be changed to "ulcibp" and the write community to "acorb".

In Apollo release 1.8 and later, no change of the read and write community is required, use the default ones (public, barco).



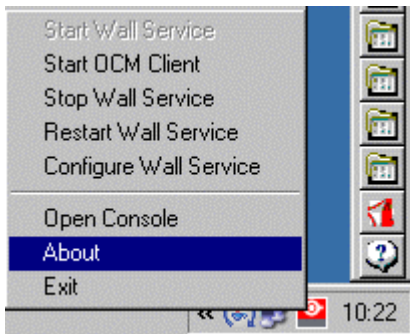
OVD wall service provides a logging console to supervise the system. This console is opened via the command **Open Console**.

Subsequently the console window is displayed:

```
OVD_WallServiceConsole - tail.exe --follow OVD_WallService.log --lines=50 --sleep-interval=2
2005-06-22 09:14:07,900 [INFO] OVD Wall Service is being shut down NOW... (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:07,900 [INFO] Enabling IR Control of all modules... (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:10,644 [INFO] Closing Serial Port COM3 (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:12,767 [INFO] OVD Wall Service was stopped! (con.barco.compose.devices.facade.ovd.WebServiceStartup)
2005-06-22 09:14:20,768 [INFO] ===== (con.barco.compose.devices.facade.ovd.WebServiceStartup)
2005-06-22 09:14:20,768 [INFO] OVD Wall Service (1.1.0031) was published at: http://karclt4h:6063/OVD_Hall/ (con.barco.compose.devices.facade.ovd.WebServiceStartup)
2005-06-22 09:14:20,768 [INFO] ===== (con.barco.compose.devices.facade.ovd.WebServiceStartup)
2005-06-22 09:14:24,614 [INFO] Wall: 'Barco Karlsruhe Demo Wall' (1 x 1) (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:24,634 [INFO] OVD Wall Service opens COM Port: COM3 for 9600 baud ... (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:25,345 [INFO] COM3 was opened! (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:28,499 [INFO] Disabling IR Control of all modules... (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:14:28,499 [INFO] <R1> is respondig at address: '1' (con.barco.compose.devices.backend.ovd.OVD_Module)
2005-06-22 09:14:33,507 [INFO] <R1> is respondig at address: '1' (con.barco.compose.devices.backend.ovd.OVD_Module)
2005-06-22 09:14:33,517 [INFO] Brightness Manager was started. (con.barco.compose.devices.backend.ovd.OVD_ManagerBrightnessLock)
2005-06-22 09:14:33,567 [INFO] Fixed Brightness target was initialized: 4510 (con.barco.compose.devices.backend.ovd.OVD_ManagerBrightnessLock)
2005-06-22 09:14:33,597 [WARN] The profile adjustment profile 'ServiceAdjustment' belongs to a different wall! (con.barco.compose.devices.backend.ovd.OVD_AdjustmentProfile)
2005-06-22 09:14:33,677 [INFO] SNMP traps will be send to: 150.158.180.61 port: 162 (con.barco.compose.snmp.configuration.OverViewConfigurationReaderSNMP)
2005-06-22 09:14:33,677 [INFO] SNMP traps will be send to: 150.158.182.39 port: 162 (con.barco.compose.snmp.configuration.OverViewConfigurationReaderSNMP)
2005-06-22 09:14:33,897 [INFO] Initializing 'OCM RC-Agent' for SNMP access ... (con.barco.compose.snmp.AgentRoot)
2005-06-22 09:14:34,187 [INFO] OCM RC-Agent available at port: 4700 read community: public write community: barco (con.barco.compose.snmp.AgentRoot)
2005-06-22 09:15:03,289 [INFO] Read only access was granted to 'OCM Client at karclt4h' (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:15:09,068 [INFO] Full access was granted to 'OCM Client at karclt4h' (con.barco.compose.devices.backend.ovd.OVD_Hall)
2005-06-22 09:15:38,530 [INFO] Read only access was granted to 'OCM Client at karcltbt' (con.barco.compose.devices.backend.ovd.OVD_Hall)
```

6.7.8 About the service

Use the entry in the context menu of the icon in the system tray to open the **About** dialog of OVERVIEW CONTROL MANAGER service:

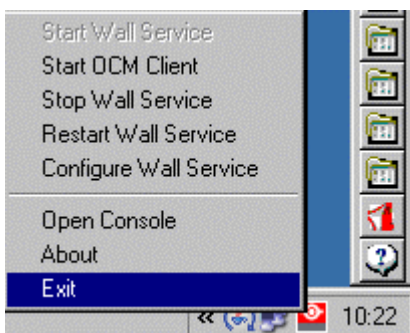


6.7.9 Exit

This command closes the context menu of the OVD wall service icon in the system tray and removes the icon from the system tray.



To make the icon re-appear, select Start|Programs|OverView Control Manager|Wall Configuration.



7 OCM client application

7.1 Different operating systems

The user interface of the client application has the same look and feel and provides the same commands and functions on Linux and on Windows systems.

7.2 Launching the client application

After starting the client application, the startup screen is displayed:



Subsequently the reduced window of the OVERVIEW CONTROL MANAGER shows up. As soon as the OVD wall service is found, the window extends and shows the configuration of the display wall in a grid view.



The OVERVIEW CONTROL MANAGER window has a **menu bar** comprising the entries **File**, **Action**, **View** and **Help**. Below the menu bar, the **tool bar** allows to select the most frequent commands via a simple mouse click on a button.

When in the dialog **Configure OverView Control Manager** a password has been entered for the display wall, the client starts up in the read-only mode, i.e. all menus and buttons are disabled.

Enabling of the functionalities then requires to enter the correct password in the **Authorization** dialog (**File|Authorization**)



Starting with Release 1.2, different password for service mode and operator mode are supported. The operator mode can be accessed either by the password for the service mode or for the operator mode. The expert mode requires the password of the service mode.

Using the commands of the **File** menu or the button on the tool bars always refer to the entire display wall. In case an individual module should be addressed, select the respective module and use its **context menu** (right mouse click).

The representatives of the modules (**Module view**) or the lamps (**Lamp view**) in the grid have a context menu directly giving access to the commands of the item.

The caption of the window indicates configuration, name and owner of the display wall. The status bar informs about the projector status (**running**), the lamp operation mode (**cold standby**), the brightness modus (**fixed at 120lx**) and the overall health of the system (**fully operable**)

In the **grid**, multiple information is displayed. The icon on the upper left corner of every projection system shows the global health of the individual unit. The characters in the upper right corner show the address of the projection system in the grid. The reading in the center indicates the operation status.

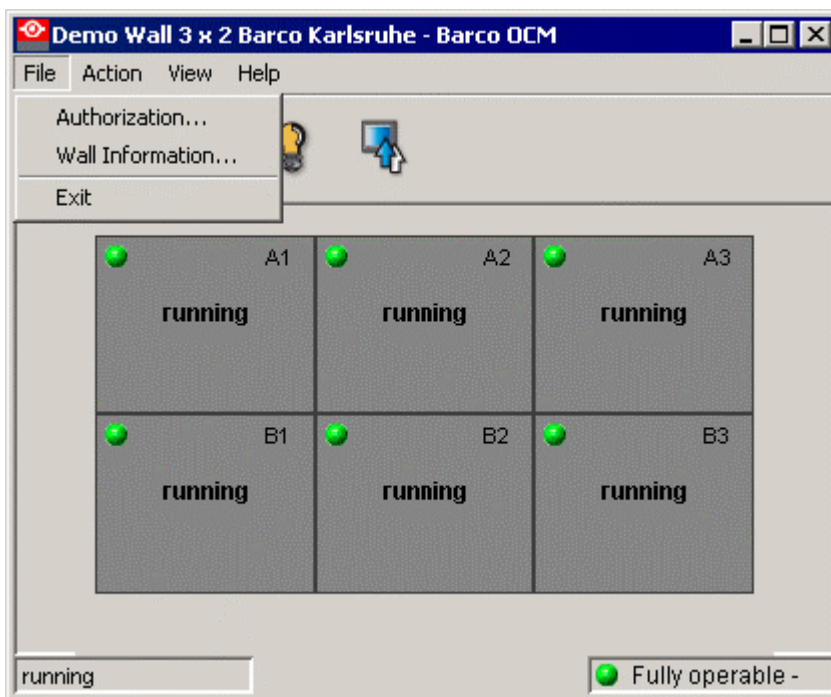
The gray color indicates the brightness. If all cells have the same gray color, the display wall features homogeneous brightness. In case the gray color is different, you can easily make out the brighter and darker cubes on the wall.

Except for the address, all these information can change, either automatically (health) or by selection (operation status is only one of the properties). Of course to change the values on intention authorization has to be given, cf. **File|Authorization**.

In case there is no information available about the projection unit or a lamp, this is indicated by a question mark (e.g. if the lamp is a backup lamp in cold standby mode and has not been run since the OVD wall service has been started. Then activate the lamp to introduce it to the OVD wall service. The question marks will disappear, and the actual values of the respective properties will be shown).

For more information, cf. [Wall Information – Health Details](#)

7.3 File menu



The **File** menu comprises the entries **Authorization**, **Wall Information** and **Exit**.

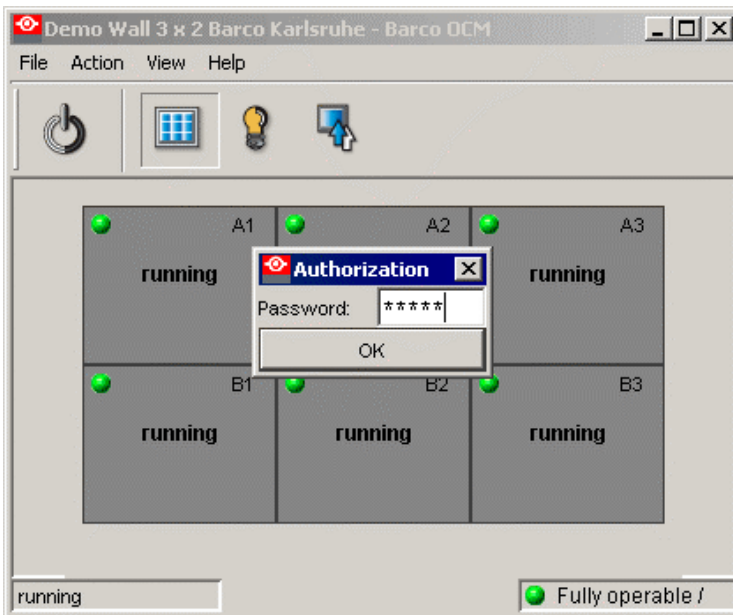
7.3.1 Authorization

When in the dialog **Configure OverView Control Manager** a password has been entered, the functionalities of the OVERVIEW CONTROL MANAGER software are read-only until the correct password has been entered in the **Authorization** dialog.

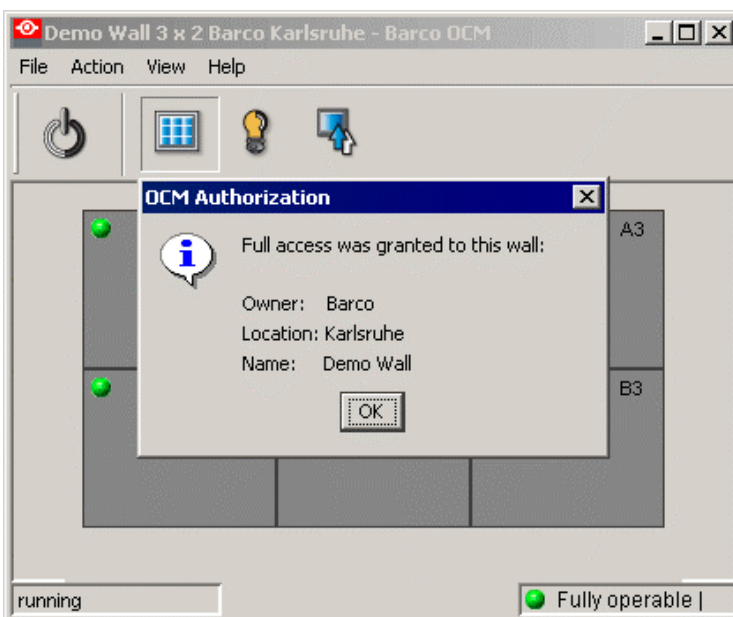


This authorization feature has been introduced to make sure that only authorized people control the display wall.

Select **Authorization** from the **File** menu. A dialog pops up to enter the password:



Close the dialog with **OK**. In case the entry matches the password, the menus and buttons get enabled and you are informed about your access rights:

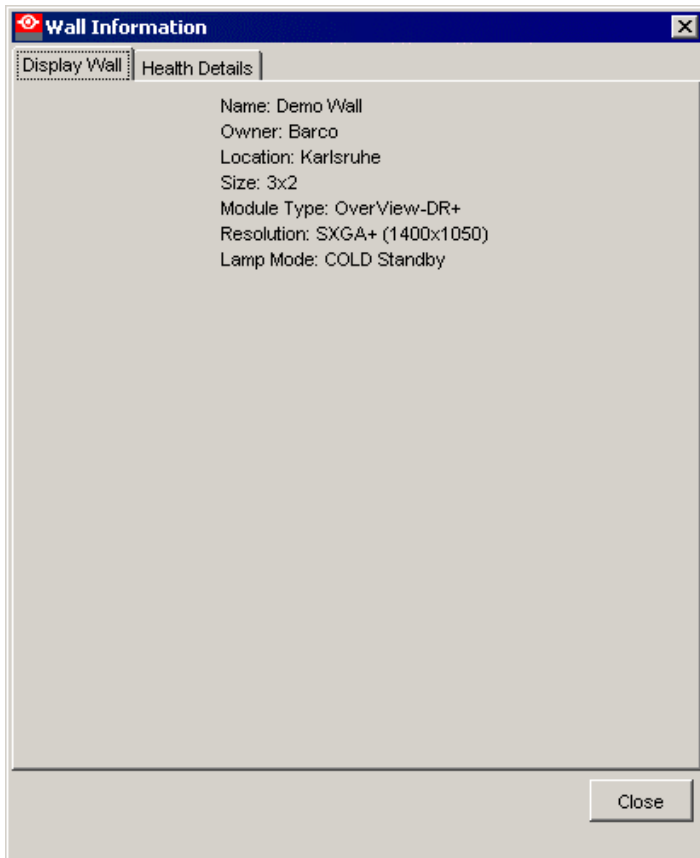


You can also add the password as parameter to the shortcut launching the OCM client.

7.3.2 Wall Information

The menu item **Wall Information** opens a dialog with 3 sheets, **Display Wall**, **Wall Service**, **Health Details**

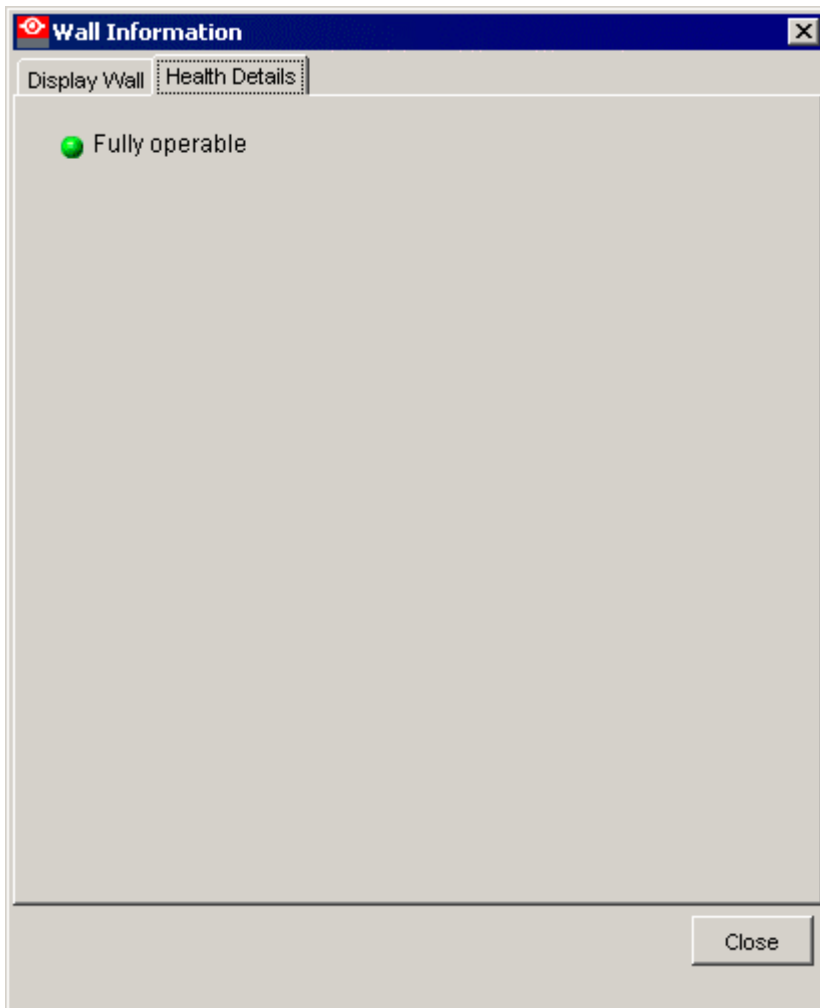
7.3.2.1 Wall Information – Display Wall



On the Display Wall tab, the following information can be found:

Entry	description
Name	Name of the display wall as entered when configuring the OVD wall service.
Location	Location of the display wall as entered when configuring the OVD wall service.
Owner	Owner of the display wall as entered when configuring the OVD wall service (Customer)
Size	Size of the display wall combined from the entries columns and rows as entered when configuring the OVD wall service
Module Type	Type of projection system, received from the projection unit: "D" means based on DLP technology "G" means XGA resolution "R" means SXGA resolution "R+" means SXGA+ resolution
Resolution	1024x768: XGA 1280x1042: SXGA 1400x1050: SXGA+
Lamp Mode	Type of operation mode: Hot standby (both lamps on) Cold standby (active lamp on, backup lamp off)

7.3.3 Wall Information – Health Details

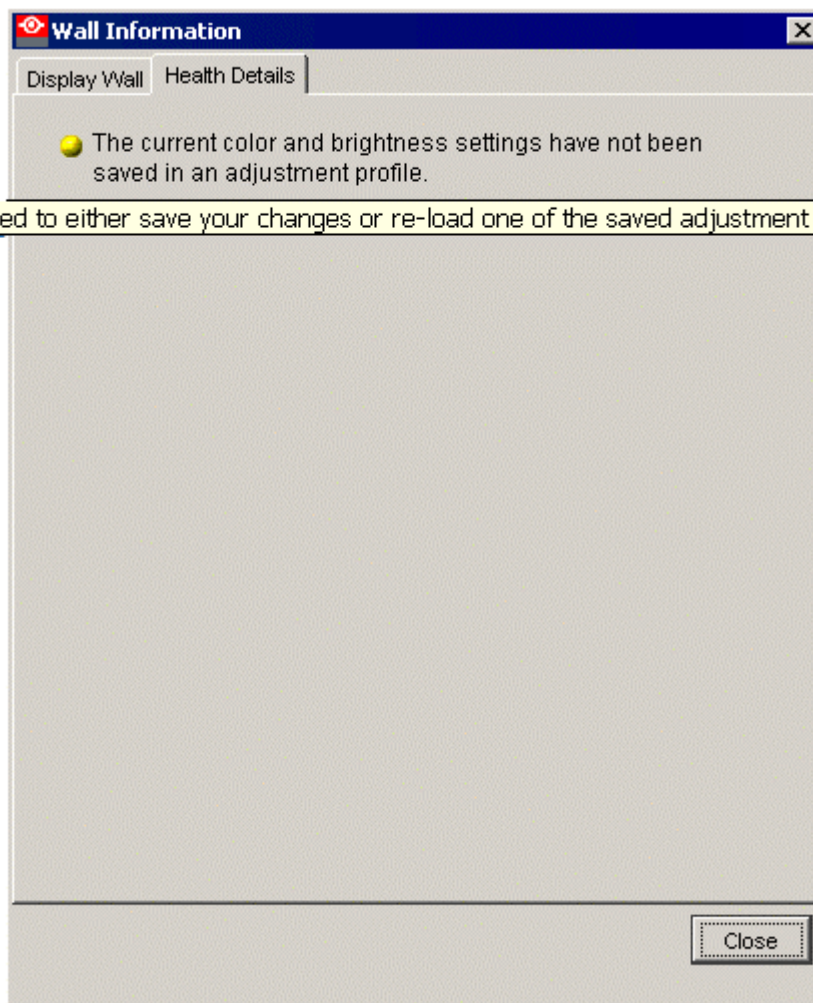
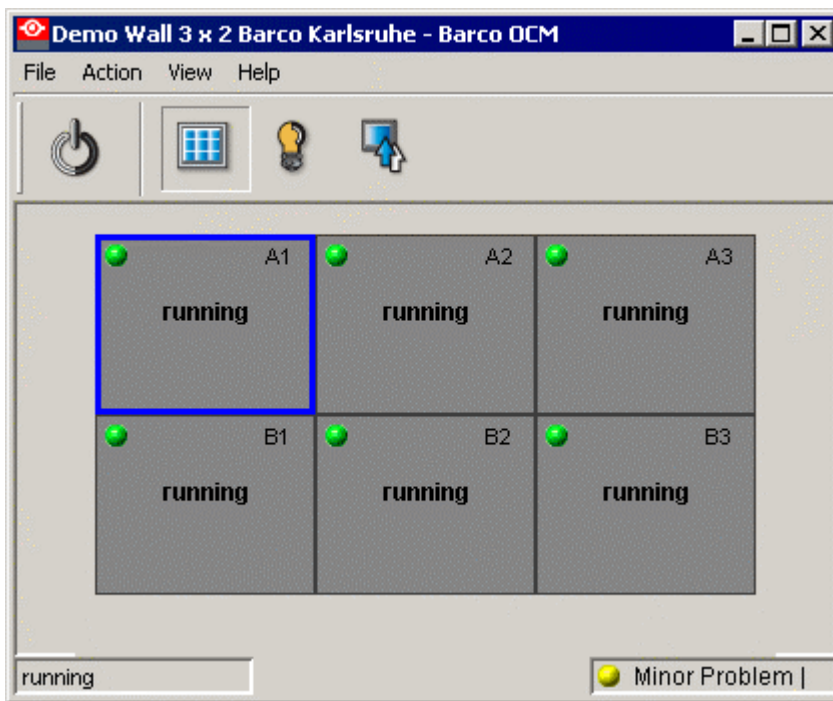


The **Health Details** dialog shows the overall health of the display wall. This information is also indicated in the status bar.

The color of the icon has following meaning:

Color	status
Green	Functional, no problems are known
Grey	Unknown: the system cannot be accessed, no information is available if it is ok or not
Yellow	A minor problem has occurred. This problem should be solved during the next scheduled maintenance action
Orange	A major problem has occurred. This problem should be solved as soon as possible, since it can easily grow into a critical one
Red	Critical problem, the system is no longer available

In case the icon is gray, yellow, orange or red, additional information is given to track the problem. This information can be seen in the tool tips showing up when moving the mouse over the information:



It's recommended to either save your changes or re-load one of the saved adjustment profiles. |

The following table lists some possible problem and how they are indicated with respect to their severity

Possible problems	Minor	Major	Critical	unknown
<i>Connection health</i>				
client does not find host system		x		
client does not find service on host system		x		
connection lost between client and server		x		
build version of client different from build version of host	x			
configured COM port does not exist			x	
configured COM port cannot be opened		x		
no wall hardware can be found		x		
<i>Module health</i>				
modules have different brightness targets	x			
modules do not respond		x		
unknown wall health				x
software control disabled				x
lamps differ too much in brightness to find a common target		x		
lamps differ too much in brightness, probably soon no common target will be reached any more	x			
lamp problem on active lamp	x	x	x	x
lamp problem on backup lamp in hot standby	x	x	x	x
cold standby and critical lamp problem on backup lamp		x		
cold standby and major/minor lamp problem on backup lamp	x			
active lamp failure			x	
backup lamp failure, cold standby		x		
backup lamp failure, hot standby			x	
old firmware of projection unit			x	
unsupported/unknown firmware of projection unit		x		
module has been shut down due to a problem		x		
projector in standby, lamp door open	x			
projector running, lamp door open		x		
dimmer error	x			
fan error		x		
over temperature error			x	
Problem with projector electronics (stepper motor)			x	
Problem with optical dimmer (Motor is stuck)		x		
Problem with optical dimmer (motor was hanging)		x		
Problem with optical dimmer (no mark)	x			

Possible problems	Minor	Major	Critical	unknown
Problem with optical dimmer (multiple marks)	x			
<i>Lamp health</i>				
lamp cannot reach brightness target	x			
lamp failure			x	
lamp optimization failed		x		
brightness calibration invalid		x		



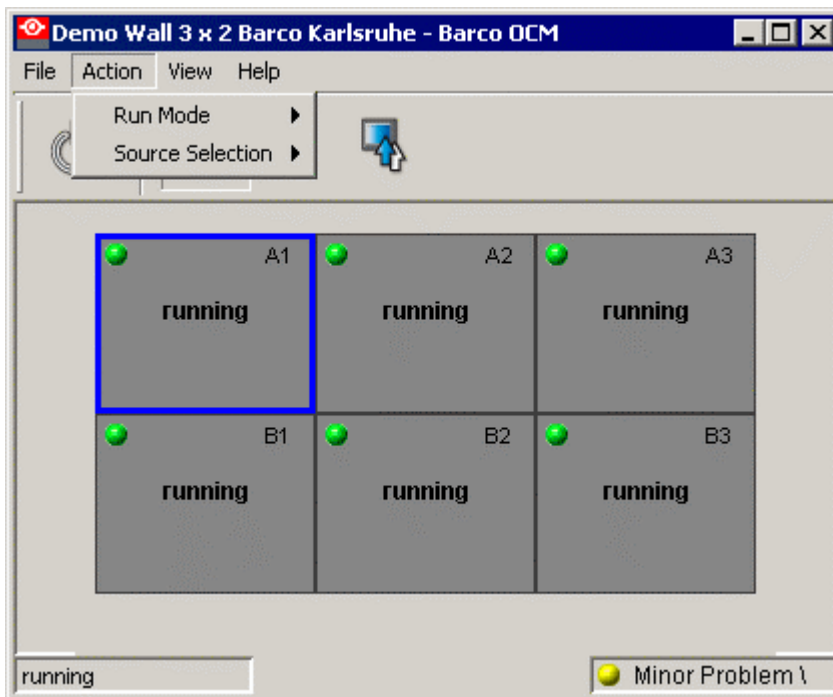
In case of critical or major configuration and/or connection problems the wall status is indicated as unknown.

7.3.4 Exit

Use this command to quit the client application.

7.4 Action menu

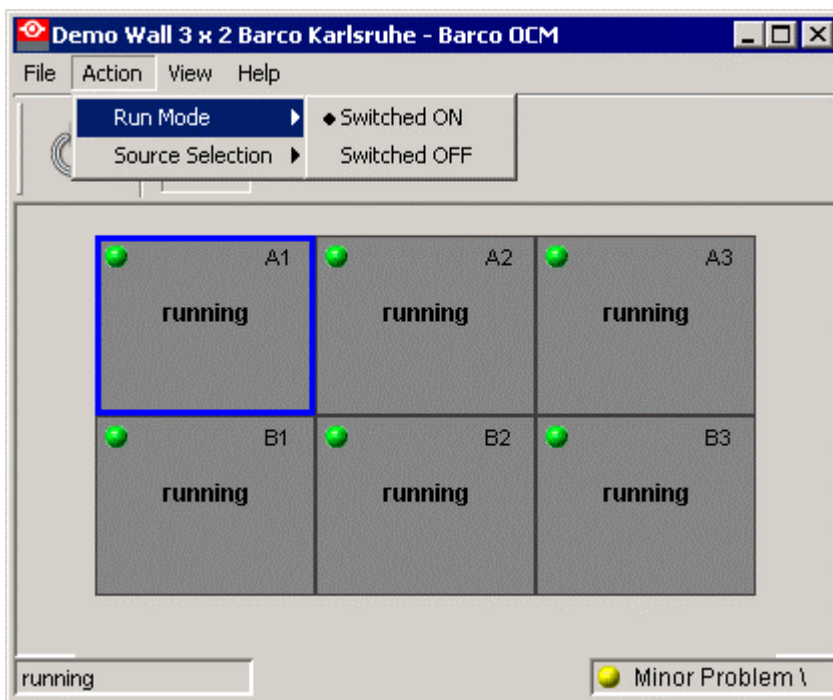
The Action menu comprises the menu items **Run Mode**, **Source Selection (Firmware 3.x only)**,



In the **Action** menu, a black dot is indicating that the respective status applies for every projection module of the entire display wall. In case there is no black dot, some of the projection modules show this features, the others not.

In addition it is possible to switch the entire display wall into the desired status by simply selecting this status, e.g. selecting **Action|Run Mode|Switched OFF** will switch off every projection module and make the entire display wall having the status **Switched OFF**, indicated by a black dot.

7.4.1 Run Mode



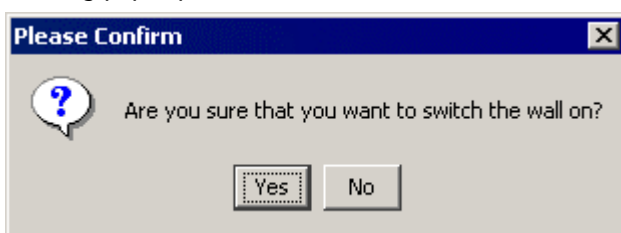
The **Run Mode** menu entries shows if all of the projection modules are switched on or all of them switched off or if some of them are one, others off: The respective entries (Switched ON / Switched OFF) are only then indicated with a black dot if all projection modules of the entire display wall are on or off.



If none of the entries show the dot, some of the projection modules are on, others off.

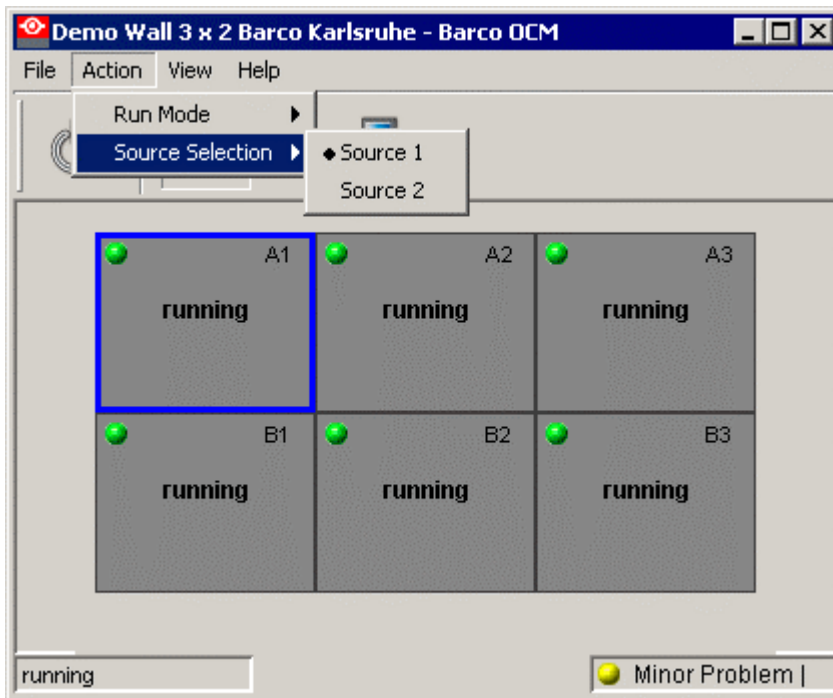
No matter if all projection systems have the same status, the entire display wall can be switched to the same status on (or off respectively) by selecting the command **Switched ON** (or switched OFF).

A dialog pops up which has to be confirmed to execute the switching:



(Via the context menu, an individual projection module can be switched on/off.)

7.4.2 Source Selection (firmware 3.x only))



Projection modules with firmware 3.x have two DVI inputs, which allow to display alternatively two sources. The current source to be displayed can be selected.

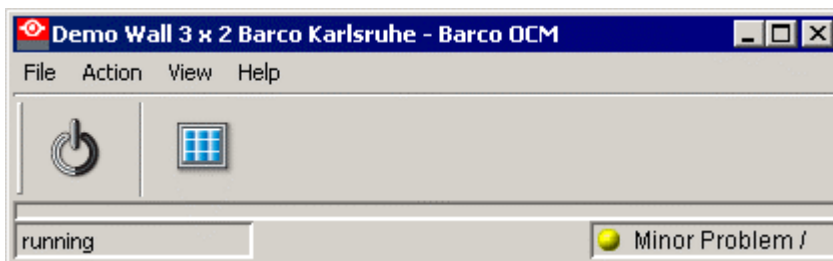
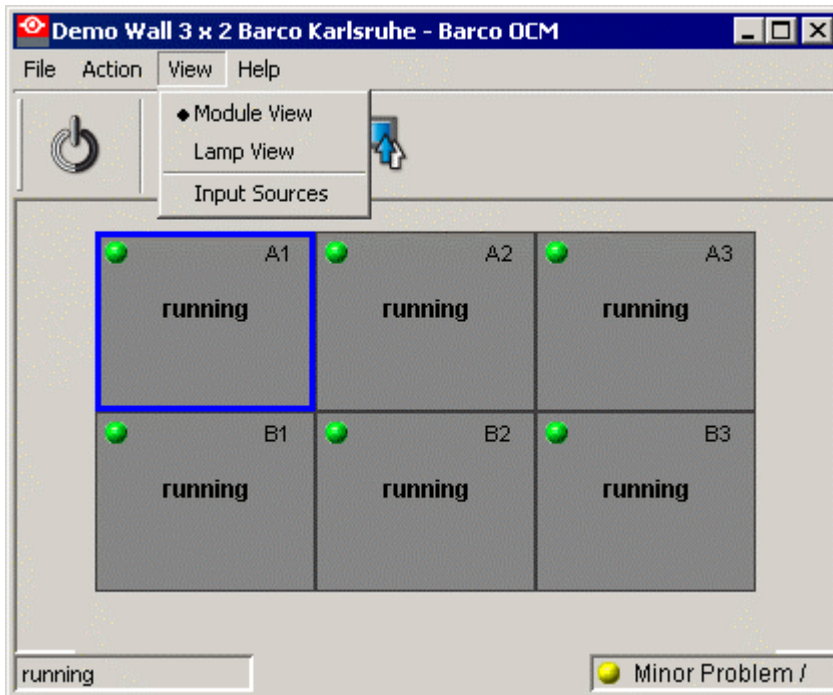
(Via the context menu, the settings of an individual projection module can be modified).

7.4.3 View Menu

The window of the OVERVIEW CONTROL MANAGER manifests in three modes.

It can be reduced to show only the menu bar and the tool bar.

Reduction is done by selecting the already selected view again: the commands in the **View** menu are toggle commands.

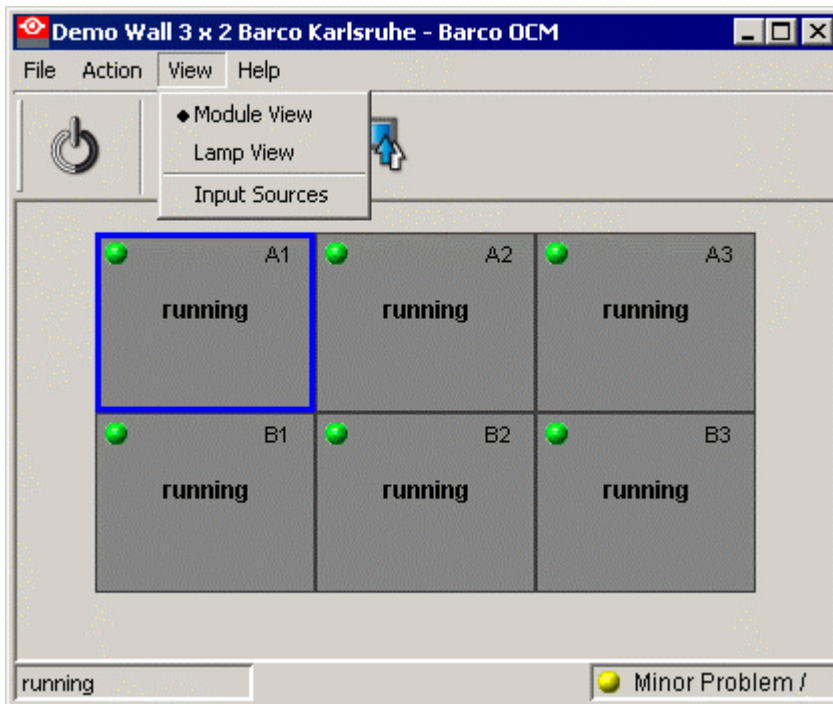


The reduced view can be extended to show the display wall (grid view). This view can be a module view or a lamp view.

In case of projection modules with firmware 3.x, also a dedicated view showing the settings of the input sources is available.

The **View** menu allows to switch between **Module View** and **Lamp View** (and **Input Sources** in case of firmware 3.x)

7.4.4 Module View



The **Module View** shows the configuration of the display wall as projection modules. The display wall is seen from front.



If you press the ALT key when selecting a module in the grid, the OverView Control Manger highlights the respective projection module on the display wall!

The green icon on the upper left corner of every projection module shows the health of this module. The icon can have the following colors:

Color	status
Green	Functional, no problems are known
Gray	Unknown: the system cannot be accessed, no information is available if it is ok or not
Yellow	A minor problem has occurred. This problem should be solved during the next scheduled maintenance action
Orange	A major problem has occurred. This problem should be solved as soon as possible, since it can easily grow into a critical one
Red	Critical problem, the system is no longer available

In the upper right corner the module position in the configuration of the display wall is indicated. The most upper row is named row A, the second on row B and so on. The most left module of every row gets the number 1, the next module 2 and so on. The module name combines the position in the display wall with respect to rows and columns.

If no property table is selected, the modules show the overall status of the projection unit.

In case there is no information available about the system, a question mark is displayed.

If **Module View** is active, and this entry is selected again, the view is reduced to the menu bar and the tool bar and does no longer show the grid.

7.4.5 Lamp View



In **Lamp View** every projection module is sub divided in lamp top and lamp bottom. The active lamp has a bold border. The status of every lamp is indicated by the color of the square.

In case the lamp is switched off (cold standby), no information can be derived from this lamp. Therefore the square is grey.

In case of a lamp failure, the indicator will turn from green to red.

In case it is run in cold standby, a broken lamp is a major problem which very soon can become a critical one if the broken lamp is not replaced.

In case it is run in hot standby, a broken lamp is a critical problem.

Depending on how the lamp problem is regarded, the health status of the module shows a minor or a major problem. The round icon then will turn from green to yellow or to orange.

If **Lamp View** is active, and this entry is selected again, the view is reduced to the menu bar and the tool bar and does no longer show the sub divided grid.

7.4.6 Input Sources (firmware 3.x only)

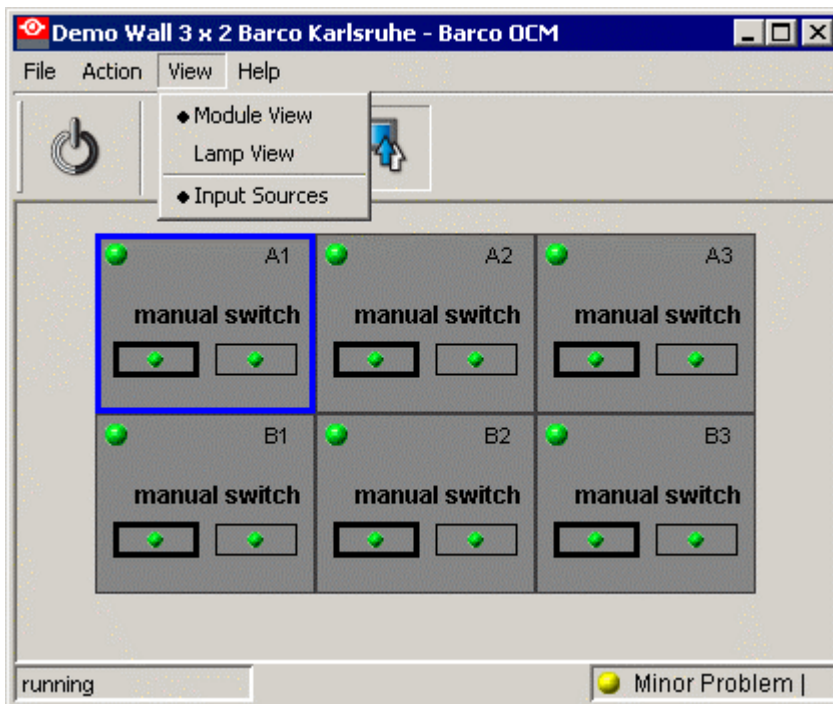
When **View|Input Sources** is selected, in every projection modules two rectangles represent input 1 (source1, left rectangle) and input 2 (source 2, right rectangle).



For display walls employing projection units with firmware 2.x and firmware 3.x (projection units of the first and second generation), cf. [Projection units with one and with two DVI inputs \(XGA resolution\)](#)

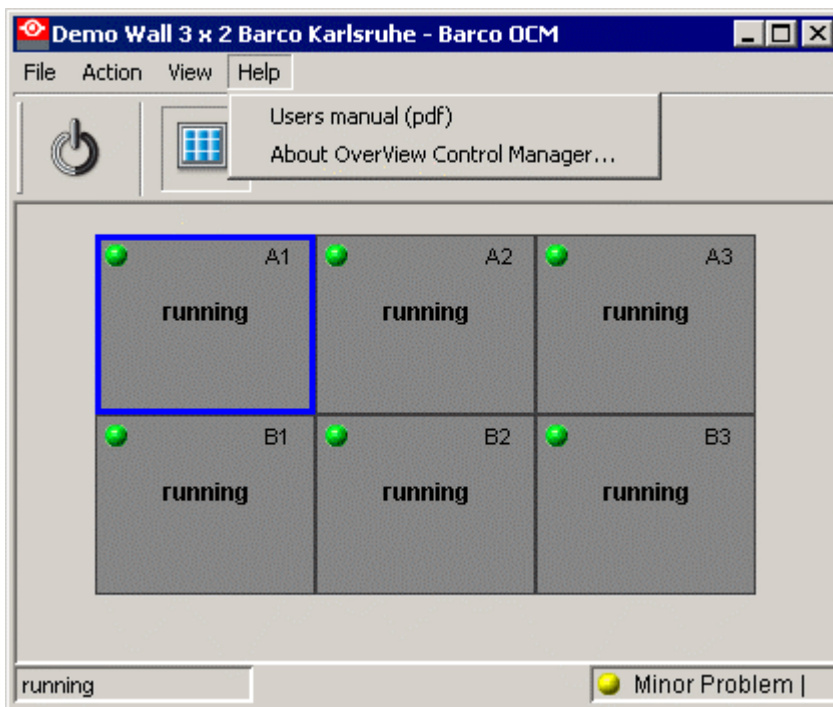
In case a source is connected, the rectangle shows a green dot. In case no source is connected, the rectangle shows a red dot.

The currently active source has a bold border.



7.4.7 Help Menu

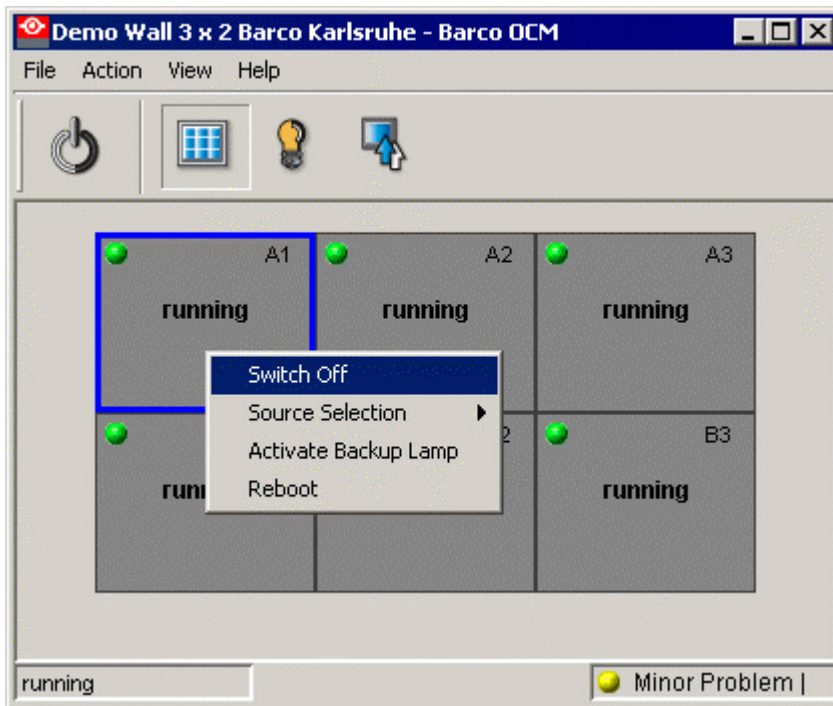
The **Help** menu gives access to the user's manual in PDF format and has the entry **About OverView Control Manager** which informs about the software version and the user level of the client application.



7.5 Context menu of the items in the grid

Right click on a cell in the grid. The entries of the context menu depend on the selected view.

7.5.1 Module view

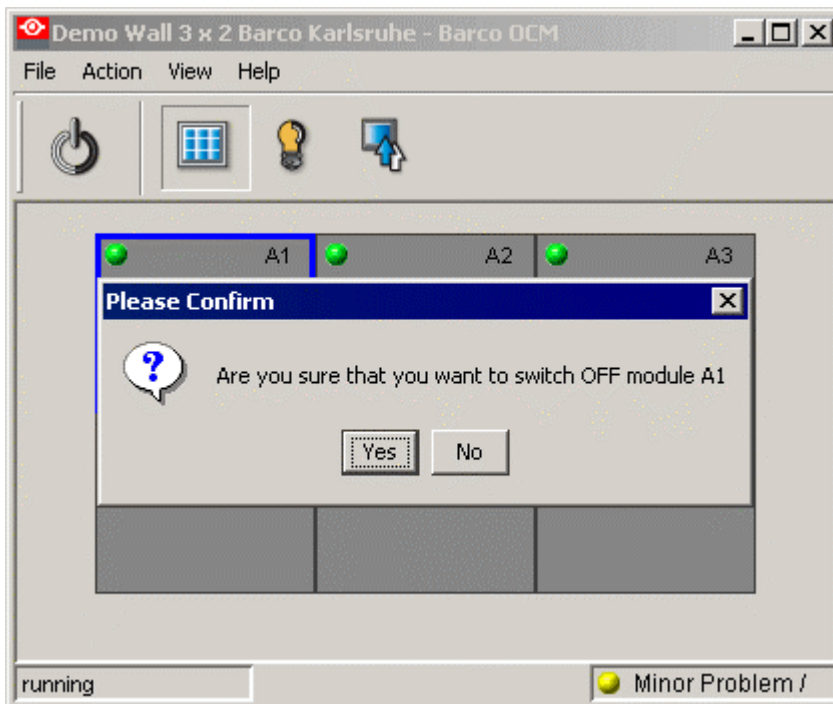


The context menu of the modules representatives comprises the entries

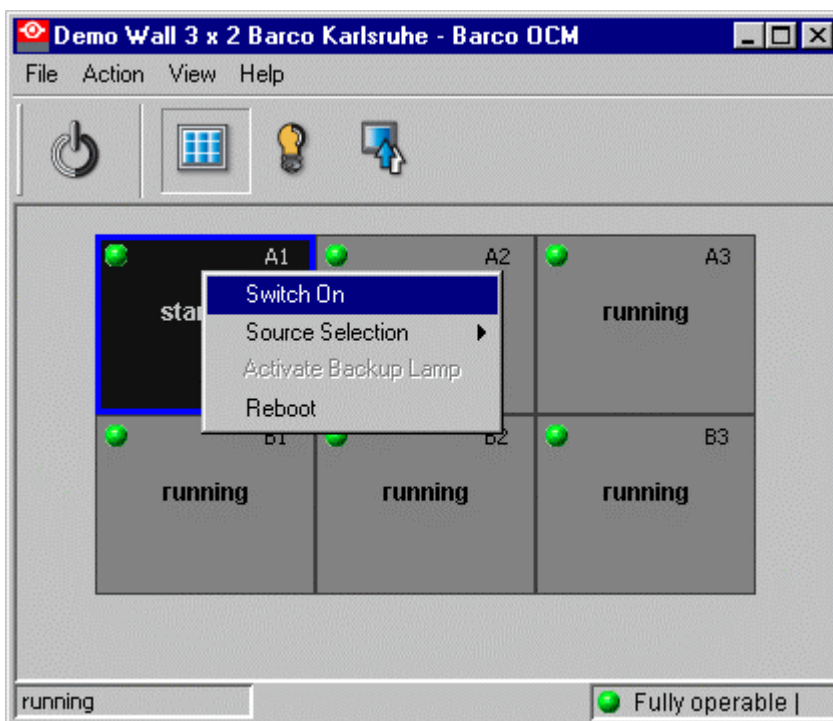
Menu entry	description
Switch off / on	switches the current projector to standby (in case it is running) or in run mode in case it is in standby.
Source Selection	Firmware 3.x only: allows to select one of the sources as active source and to set the source switching mode (manual, Auto Preference, Auto switch)
Activate Backup Lamp	switches the active lamp
Reboot	Allows to reboot the projector

7.5.1.1 Switch off

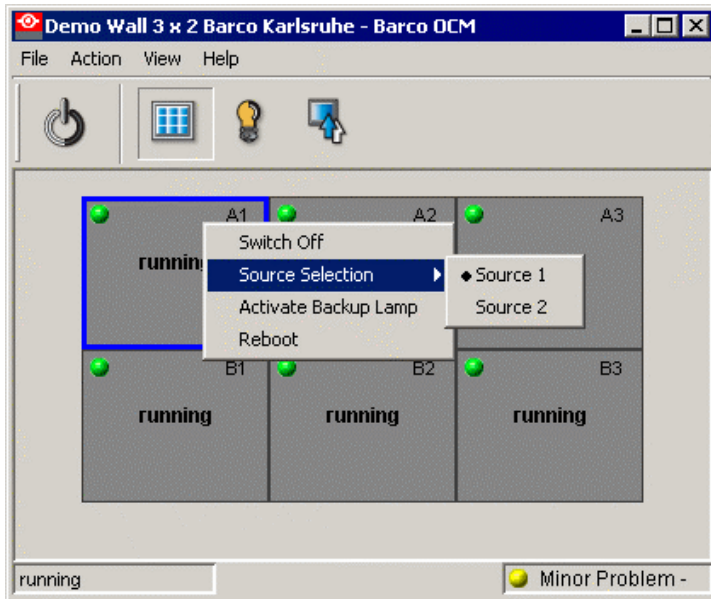
This command switches the currently selected projection module to standby. Confirmation is required.



In case it is accepted, the projector is switched to standby. This is visualized in the grid by a dark module. The entry in the context menu then toggles to switch on (of course all lamp related entries are disabled since they are not available with a projector in standby mode):



7.5.1.2 Source Selection (firmware 3.x only)



The currently selected source and switch mode is indicated by ◆.

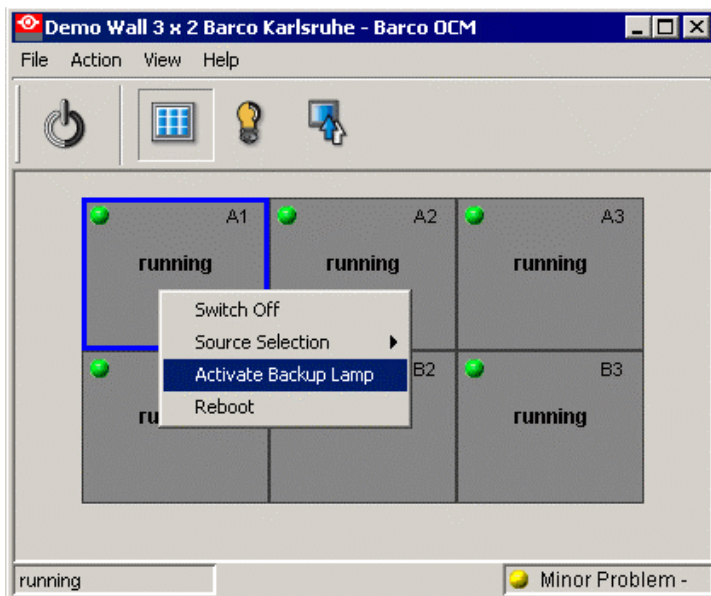
To switch the source, select the currently inactive one.

Select the desired switch mode and click it to activate: the black dot will be set to the newly selected mode.

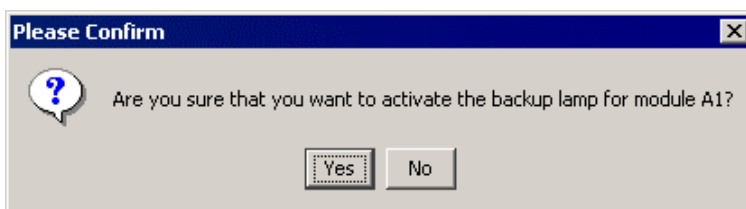
7.5.1.3 Activate Backup Lamp

This command switches the active lamp: In case of cold standby, the backup lamp first is ignited, and then the lamp lift moves to position the backup lamp in front of the optics. The formerly running lamp is switched off.

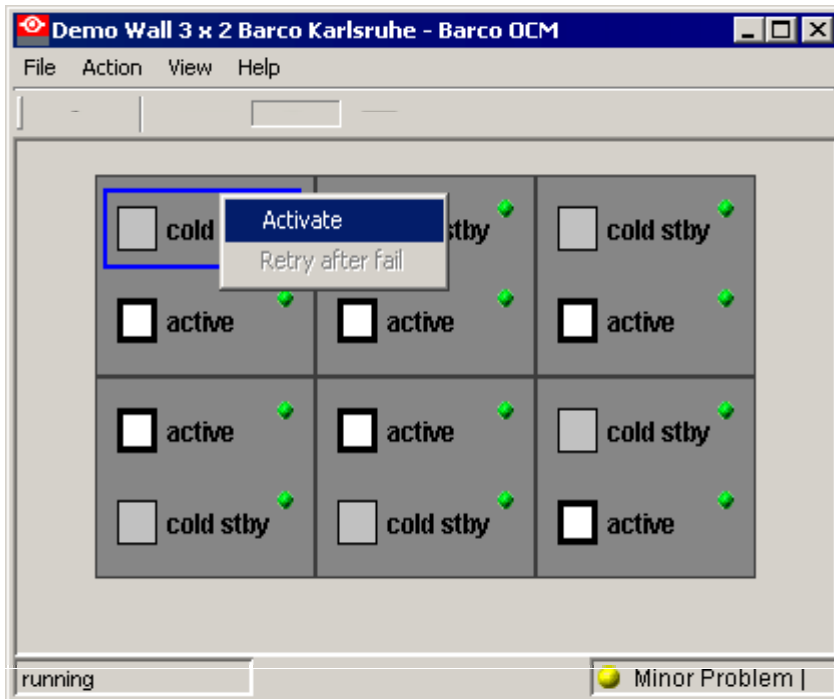
In case of hot standby, all lamps are on, and activating the backup lamp changes reduces to move the lift. The backup lamp becomes the running lamp and vice versa.



This command requires confirmation before being executed.



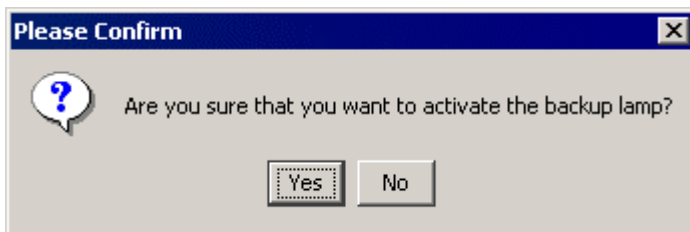
7.5.2 Lamp view



The context menu in the **Lamp View** always refers to the currently selected lamp. Depending on the lamp status (active lamp or backup lamp), commands are enabled (available) or disabled.

7.5.2.1 Activate

This command is only available for the backup lamp and moves the backup lamp to illuminate the optics. In case of cold standby mode, the backup lamp of course is ignited first.



7.5.2.2 Retry after fail

Sometimes a lamp switches off due to a voltage error. This is considered by the system as a broken lamp. The error bit is set, and the lift does not move any longer.

However it might be possible to re-ignite the lamp.

The command **Retry after fail** resets the error bit of this lamp and enables the lift again. In case the system is operated in hot standby mode, the lamp is tried to be ignited. If it fails, the error bit is set again.

In case of the system is operated in cold standby mode, the error bit is reset, and the lift moves again. The lamp is not ignited before it becomes the active lamp. If it fails, the error bit is set again.



Since the employed lamps are of type short arc lamps, it is always recommended to try again to ignite them after a lamp failure did occur, especially in case of compact lamp driver!

7.6 Tool bar

The icons of the tool bar give direct access to the following commands:



Corresponds to the command **Action|Run Mode**

On/off button to switch the entire display wall on (from standby modus into operation modus) or off (from operation modus to standby modus).



Corresponds to the command **View|Module View.**

Toggles between showing and hiding the grid (expands and reduces the windows)



Corresponds to the command **View|Lamp View.**

Toggles between showing and hiding the grid (expands and reduces the windows)



Corresponds to the command **View|Source Selection** (SXGA+ only)

Toggles between showing and hiding the grid (expands and reduces the windows)

The buttons switching the views and the property tables are toggle buttons. Click once to e.g. select **Module View**. Click again to reduce the window to show only the menu bar and the tool bar. Or click on **Lamp View** to see the lamp representatives in the grid.

8 Special configurations

8.1 Localization

Starting with release 1.3, the OverView Control Manager allows setting the language of the user interface. There are two requirements:

- The language files must be installed (this is not part of the setup!)
- The language parameter has to be given as the first start parameter in the shortcut.



The language has to be set as digits ISO 639 code (en, de, ja, es).

The standard delivery of OverView Control Manager comes exclusively with English language files. All other language files are not part of the product / of the setup.

For the creation and implementation of different language files, see chapter below.

8.1.1 How to create language files

A valid language file has to comply with the following specifications:

- Location – identical to the location of the corresponding English language file
- Filename – identical to the corresponding English language file, except of the iso 639 code

The following table lists some of the iso 639 codes:

Language	Iso 639 code
Chinese	zh
Danish	da
Dutch	nl
Englisch	en
French	fr
Finnish	fi
German	de
Greek	el
Italian	it
Japanese	ja
Korean	ko
Norwegian	no
Portuguese	pt
Spanish	es
Swedish	sv
Turkish	tr

OverView Control Manager comes in total with 5 language files, all called messages_en.properties::

...**Barco OverView Control Manager\Client\com\barco\sgcm\ovd_client\control\messages_en.properties**

...**Barco OverView Control Manager\Client\com\barco\sgcm\ovd_client\model\messages_en.properties**

...**Barco OverView Control Manager\Client\com\barco\sgcm\ovd_client\model\health\messages_en.properties**

...**Barco OverView Control Manager\Client\com\barco\sgcm\ovd_client\view\messages_en.properties**

...**Barco OverView Control Manager\Client\com\barco\sgcm\ovd_wallservice\iface\messages_en.properties**

To create a different language file, proceed as follows:

- Navigate to the folder of the English language file
- Copy the English language file and paste it into the identical location
- Rename the file by replace the iso 639 digits by the new code, e.g. **messages_fr.properties**



**It is mandatory that the file name is composed like this:
messages_iso639digits.properties.
All other file names are invalid.**

Use your favorite editor, and open the new language file. You will see something similar to the picture below.

```

projector is in not-standby the lamp will be restarted afterwards.
MenuLamp.008=Re-Calibrate Brightness
MenuLamp.009=Are you sure that you want to recalibrate this lamp?
MenuLamp.010=Please make sure to select Brightness lock mode 'Fixed'
during re-calibration.\n to make sure the brightness target is not
changed between measuring and entering the measured value\!
# 0 is a module
MenuLamp.011=Please measure {0} with a calibrated lux meter at the
shown rectangle.\nEnter the measured value and press ok to re-
calibrate
# 0 is a value, 1 is a module
MenuLamp.012=Are you sure that you measured a lux value of {0} on a
white test pattern on module {1}
# 0 and 1 are values
MenuLamp.013=Brightness is expected to be between {0} and {1} lux!
MenuLamp.014=Simulate
MenuLamp.015=Lamp Fail
  
```

A language file assigns a text string to a key. A key is e.g. MenuLamp.008; in short: everything left of the equal sign.

The text which is assigned to a key is on the right side of the equal side.

To get a localized user interface, replace the English texts by their translation into the desired language.



**OverView Control Manager is a Java based software, and requires that characters are encoded according the Unicode standard.
However, for a carriage return/a new line you may enter the escape sequence \n and you don't have to use its coding \u000A**



There are several characters with a special meaning:

marks a comment (you do not see it in the user interface)

\n marks a line break to avoid message boxes which are too wide

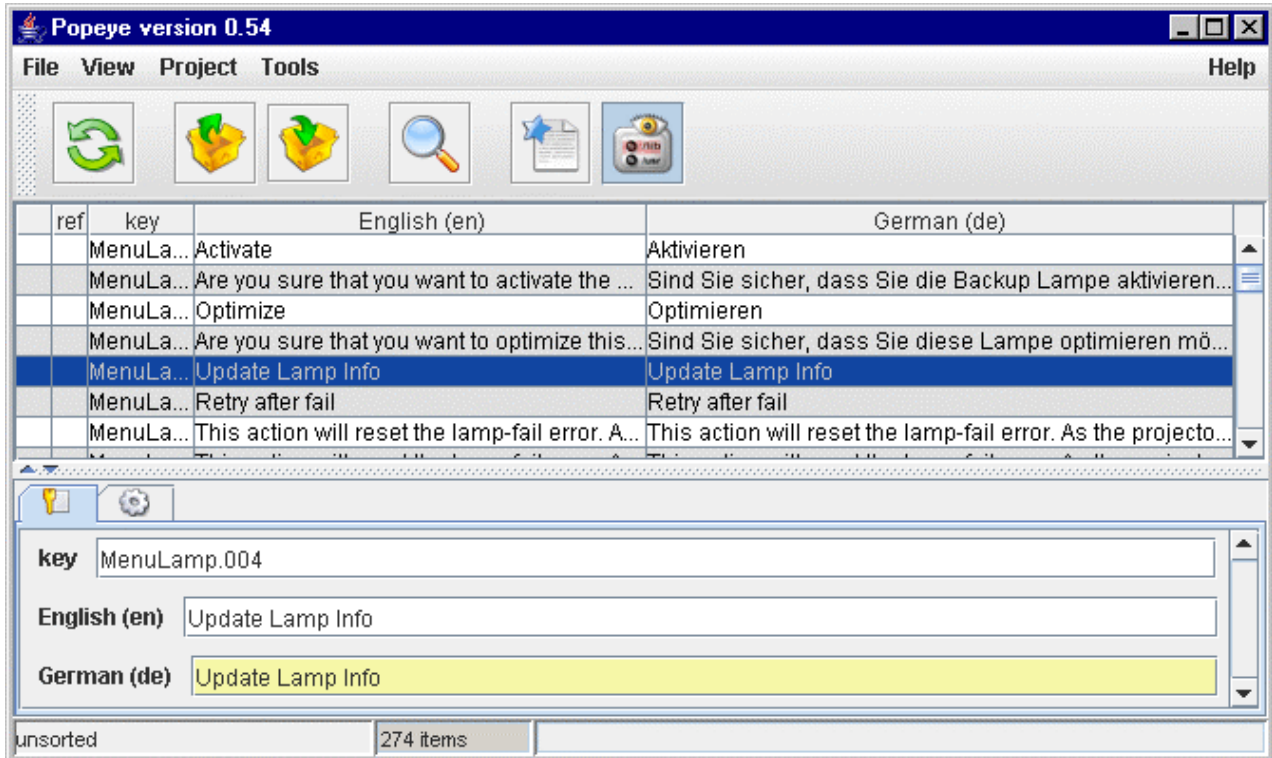
{0} marks parameters which are replaced by the system, never replace/change anything marked with curled brackets.

Translate the text strings and save the property file.

8.1.2 How to facilitate the creation of language files

Encoding special characters according the Unicode standard might be cumbersome. To make translations easier, you may visit e.g. <http://popeye.sourceforge.net/>.

Popeye is a freeware tool which offers to select the encoding standard. Thus you don't have to care about special characters in your language. It is NOT a translation tool – you still have to translate every text string. However you can do it in a kind of table, which is more convenient than a simple text file where you have to overwrite the English text with the new localized string.



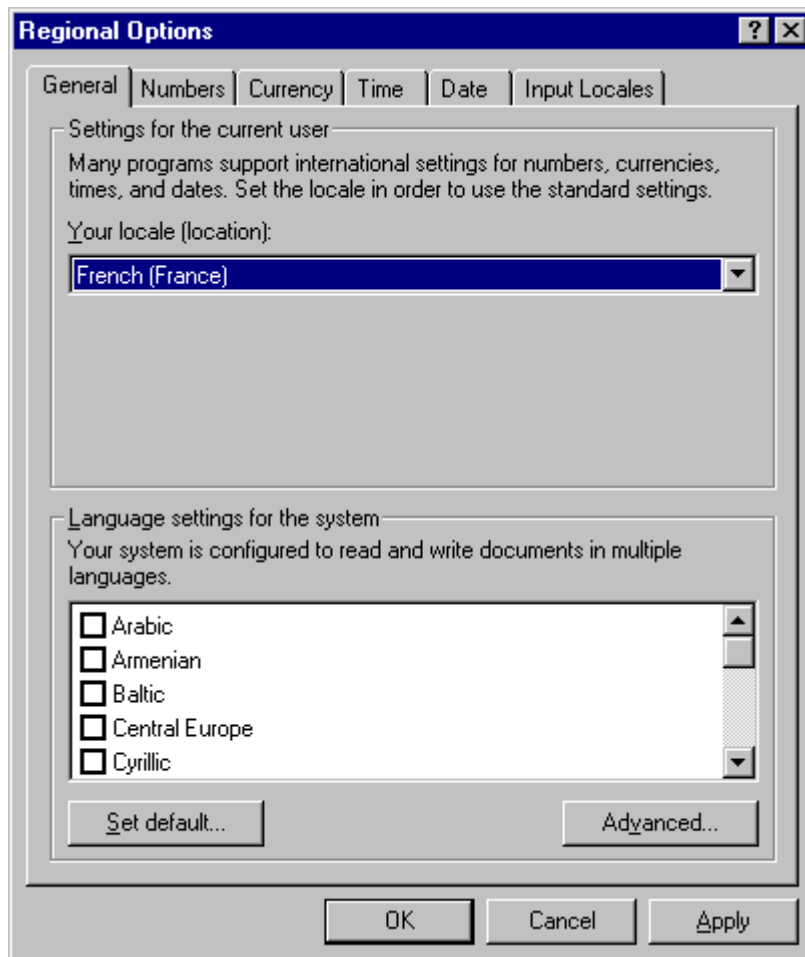
8.1.3 How to start the OverView Control Manager in a different language



Precondition: the respective language files are stored in the folders mentioned above!

In case this precondition is fulfilled, changing your regional settings to the specific country, and then launching the OCM will show you the localized user interface.

Select **Start|Setting|Control Panel|Regional Options** and select your location.



In case your favorite regional settings do not match the desired language, keep your settings, and add e.g. the parameter `-language fr` to the shortcut starting the OCM client:



The language parameter has to be the first parameter in the list!

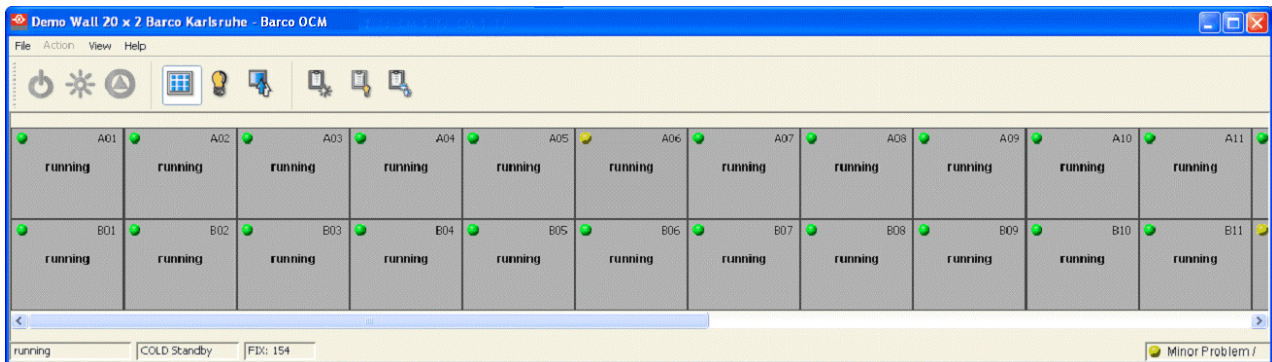
8.2 Large display wall

For the convenient monitoring of large display wall, the OCM can be started in small module view.

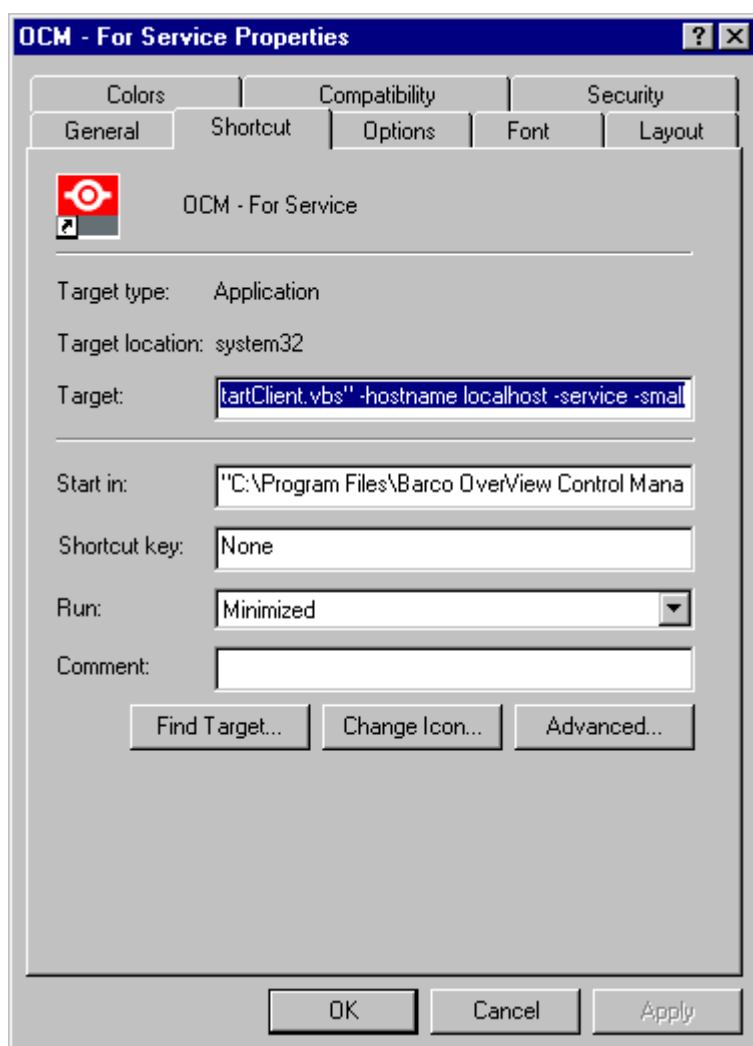
Add the start parameter `-small` to the shortcut, cf. [Configuration of the shortcut](#):

This parameter then will minimize the projection modules in the grid. This small module view allows monitoring the entire display wall without the need of scrolling.

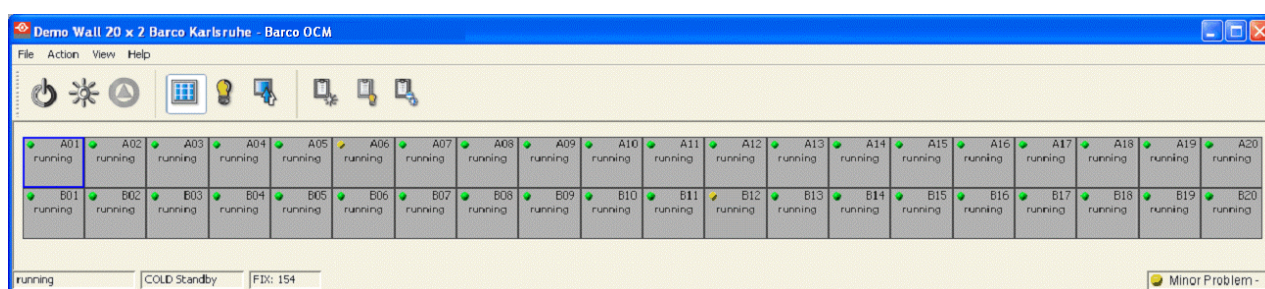
The following picture shows a large display wall with the projection modules in the grid of standard size. Please note the scrollbar: it is only a part of the display wall which can be viewed.



To enable small module view, the start parameter `-small` has to be added:



The OCM then shows the display wall in small module view. All projection modules are visible at a glance, no scrolling is required:



8.3 Projection units with one and with two DVI inputs (XGA resolution)

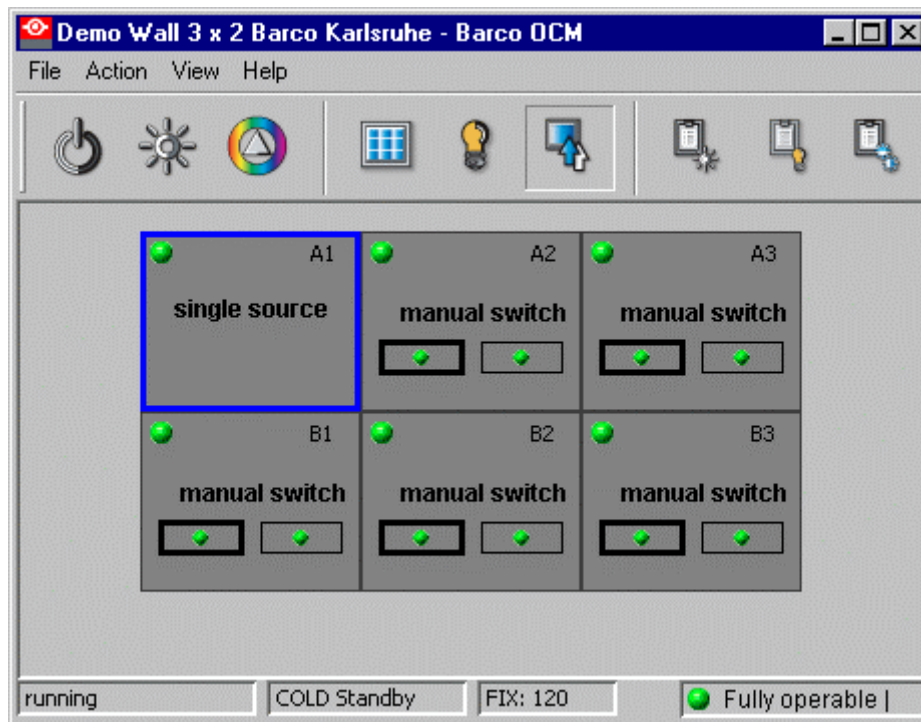
OverView D display walls with XGA resolution might employ projection units of the first and of the second generation.

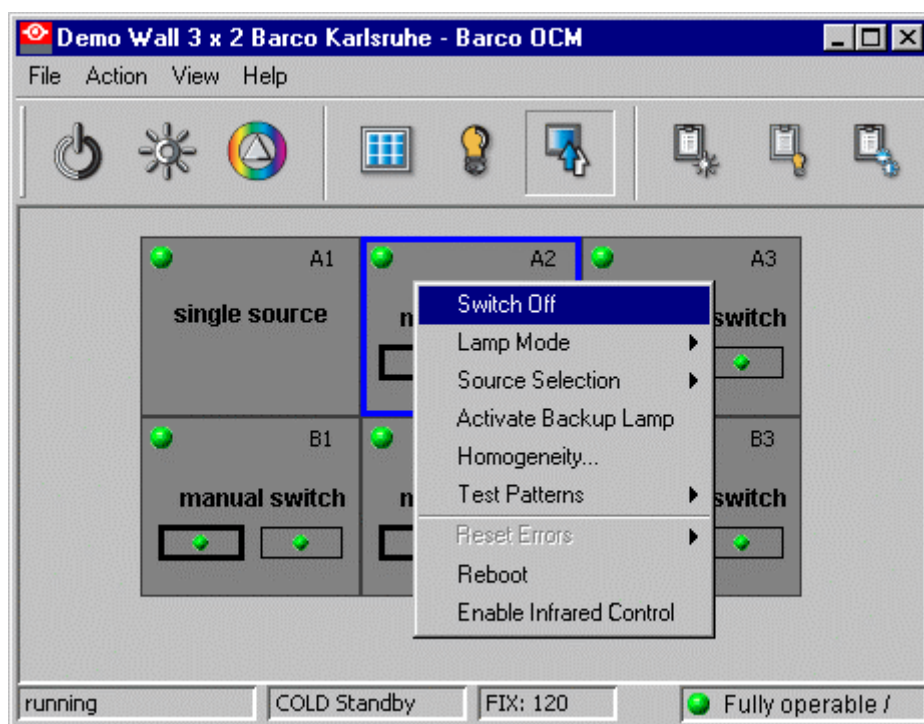
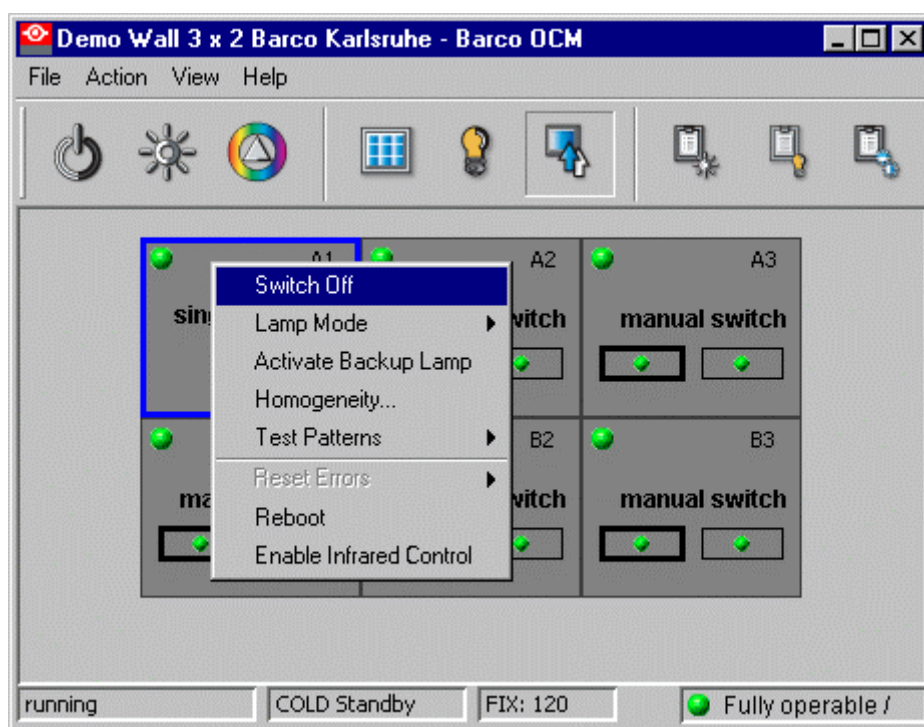
Projection units of the first generation do only have one DVI interface, therefore of course only one source can be connected, and no source switching is available. These projection units feature firmware 2.x.

Projection units of the second generation feature two DVI interfaces, thus allowing to simultaneously connect two sources and to select the active source. These projection units run with firmware 3.x.

The following picture shows a display wall where the projection module A1 employs a projection unit with one DVI interface. This is indicated in the grid as **single source**.

All settings for source selection via **Action|Source Selection** will not affect this projection module. It goes without saying that its context menu has no command **Source Selection**.





9 The OverView Control Manager configuration file

Some parameters of the OverView Control Manager can only be set or modified by editing the file

...\OverView Control Manager\Service\OVD_WallService.xml.

The following table list the entries of this file. Information about the parameters is also given in the file itself.

Setting	description
Width	Number of columns of the display wall (horizontal cubes)
Height	Number of rows of the display wall (vertical cubes)
COM_port	COM Port OCM uses for communication, change to /dev/TTY0 to use COM1 with Linux
Baudrate	Baud rate of RS232 communication, 9600 mandatory for firmware 2.x, for firmware 3.x also higher baud rates are possible
Owner	Name of customer
Location	Name of location
Wallname	Friendly name of the display wall
ip_port	TCP/IP Port the OCM uses for communication, default port is 6063
Demo	Allows running the OCM in demo mode, e.g. simulating a display wall
Rc_agent	Indicates whether the Barco RC Agent shall also run. In case the Barco RC Agent has been selected, it has also to be configured, cf. Configuration of the Barco RC Agent
Passwd	Password of the Service (and Expert) mode, default is barco (all small!)
Passwd_operator	Password of the Operator mode, default is barco (all small!)
brightness_tolerance *)	Percentual brightness difference that must be reached before OCM indicates that a projector did not reach a brightness target. Default value = 5.
poll_interval_hf *)	Polling intervall for frequently changing paramters, default value = 2 (seconds)
poll_interval_mf *)	Polling intervall for less frequently changing paramters, default value = 10 (seconds)
bl_check_interval *)	Period the brightness manager waits between updates of the brightness target, default value = 25 (seconds)
ddp_err_auto_restart *)	Only for SXGA resolution! If set to "1", a hotfix is activated to switch the projection modules off and on again in case a ddp master/slave communication occurs, cf. DDP communication error

*) These settings can only be modified by editing the file OVD_WallService.xml



In case you never succeed in reaching the brightness target for all projectors, you might increase the birghtness_tolerance. However this only influences the visualization of a problem and not the problem itself!

10 Troubleshooting

Check this chapter for help, and for information how to contact the technical support of BARCO.

10.1 Communication problems

In case the baud rate is set to 115000 (projection modules with firmware 3.x only!) and there are a lot of communication errors logged in the logging console (cf. [Open Console](#)) the baud rate has to be reduced.



Problems in communication might occur in case the cable to the first projection unit is too long or the cable is placed next to a power cable or...

Since the dialog **Configure OverView Control Manager** only offers the baud rates 9600 and 115000, for a gradually reduction of the baud rate the file

...\Barco OverView Control Manager\Service\OVD_WallService.xml

has to be edited.

This file is located on the workstation where the OVD wall service is running.

Open this file with notepad and scroll at the end of the file. There you find the **DisplayWall** tag. One of the attributes is **baudrate**.

```

instance.
ip_port:      This is the ip port which is used for communication between the
               service and the clients. This entry should
only be altered, if
               the port is already in use and can't be freed
(default = 6063).
               If you change the port you also have to start
the OCM Client application with cmd option -ip_port xxxx
demo:         Set this entry to "1" to enable the demo mode of the
service,
               which simulates a wall, connected to the
service. Set to "0"
               for disabling demo mode.
rc_agent:     Set this entry to "1" to enable OCM RC-Agent. OVD Wall Service
will
               then expose an SNMP Agent interface.
               The behaviour of OCM RC-Agent is configured in OCM_RCAgent.xml
passwd:       Allows to specify a password that is used for Authorization in
the OCM Client application (default = "barco")
               OCM Client can be started with cmd option -passwd barco for
automatic authorization
               You can also specify "" as passwd to completely remove password
protection.
-->
<DisplayWall width="3" height="2" com_port="COM3" baudrate="9600"
owner="Barco" location="Karlsruhe" wallname="Demo Wall" ip_port="6063"
demo="1" rc_agent="0" passwd="barco">
</DisplayWall>
  
```

For Help, press F1

Reduce the baud rate gradually. Allowed values are **9600, 19200, 38400, 57600, 115000**.



To apply a value, the service has to be stopped and restarted again!

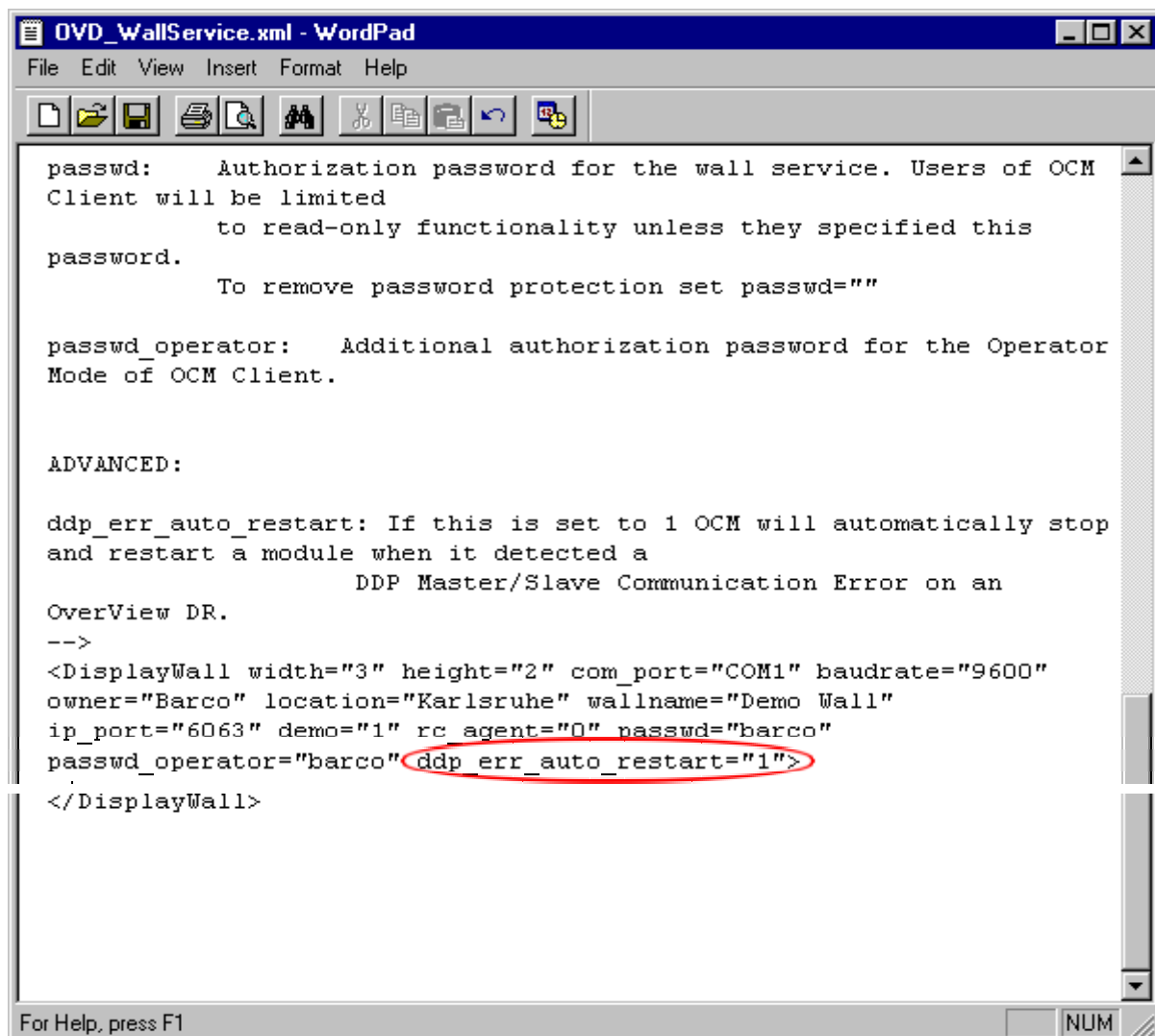
Check the log file.

Set the baud rate to the highest possible one which still has a stable communication.

10.2 DDP communication error

In case of a DDP master/slave communication error in OverView DR (SXGA resolution), the following configuration option must be set in OVD_WallService.xml:

`ddp_err_auto_restart = "1"`



This setting activates the hotfix.

In case of a DDP master/slave communication error, the OCM will then recognize this error within max. 15 seconds and switch this projection module off and on again.

In the file OVD_WallService.log, this action is listed as:

...

2005-10-17 15:26:13,812 [WARN] A DDP Master/Slave Communication Error was detected on module : A1

2005-10-17 15:26:13,812 [WARN] As work around for this problem OCM will now switch this module off and on again ...

2005-10-17 15:26:13,812 [WARN] Switching Off module: A1

2005-10-17 15:26:18,812 [WARN] Switching On module: A1

10.3 Hot Line

Feel free to contact us if you have any further questions!

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